



**MAKE YOUR HOME
BURGLAR-PROOF**

Why you need a smart door lock **p60**

**WHY WE'VE UPDATED
OUR PDF SOFTWARE**

New version adds superb tools **p18**

**RECORD
& SAVE**

TV SHOWS

Do it **NOW**
before
you get
blocked **p62**



Computer **active**

Queasy listening – page 21

ISSUE 693 | 25 SEPT – 8 OCT 2024

Learn something new in every issue

WINDOWS 10

is

DOOMED!

► We explain your **SEVEN** main options
– but which is right for you?

1. Upgrade to Windows 11 now
2. Upgrade to Windows 11 later
3. Buy a brand-new computer
4. Buy a refurbished computer
5. Ditch Windows for ChromeOS
6. Ditch Windows for Linux
7. Or... **KEEP USING WINDOWS 10!**

p50



PLUS

**PLAY MP3s THROUGH
YOUR CAR'S BLUETOOTH**

p35

**DUMP CHROME FOR THIS
AMAZING NEW BROWSER**

It might be even better than Brave **p38**



FOR THE

GAMERS AND THE CREATORS



WWW.PCSPECIALIST.CO.UK



Get an exclusive **£15 discount** with Computer Active using code **ACT24**

WELCOME



From the Editor

EDITORIAL

Content Director Marc Chacksfield
Group Editor Daniel Booth
Deputy Editor Robert Irvine
Production Editor Graham Brown
Art Editor Katie Peat
Contributors Keumars Afifi-Sabet, Judith Batchelor, Dinah Greek, Jonathan Parkyn, Nik Rawlinson, Andy Shaw

ADVERTISING

Advertising Manager Alexandra Thomas

MARKETING AND CIRCULATION

Subscriptions Sheri Taubes

PRODUCTION

Head of Production Stephen Catherall
Senior Production Manager Lawrence Brookes

INTERNATIONAL LICENSING AND SYNDICATION

Computeractive is available for licensing and syndication. To find out more contact us at licensing@futurenet.com or view our available content at www.futurecontenthub.com.
Head of Print Licensing Rachel Shaw

ONWARD RESALE

This publication may not be resold or otherwise distributed, whether at, below or above face value. Nor can this publication be advertised for sale, transfer or distribution.

PERMISSIONS

Material may not be reproduced in any form without the written consent of the publisher. Please address such requests to editor@computeractive.co.uk.

LIABILITY

While every care was taken preparing this magazine, the publishers cannot be held responsible for the accuracy of the information or any consequence arising from it. All judgments are based on equipment available to Computeractive at the time of review. Computeractive takes no responsibility for the content of external websites whose addresses are published in the magazine.

SUBSCRIPTIONS

For any enquiries and orders, email help@magazinesdirect.com, go to magazinesdirect.com. Manage your subscription online with MyMagazine. Visit www.mymagazine.co.uk/FAQ to view frequently asked questions or log in at www.mymagazine.co.uk

FULL SUBSCRIPTION PRICES

UK £77.74, Europe €144, USA \$163, Rest of the world £125

HOW TO ORDER PAST ISSUES

To purchase single past issues (print format only) visit magazinesdirect.com (click on 'Single issues' tab) – or email: help@magazinesdirect.com.
Magazinesdirect.com is owned and operated by Future Publishing Limited.

© Copyright Future PLC 2024. All rights reserved
Images from Alamy and Getty Images

Computeractive is a registered trademark. Neither the whole of this publication nor any part of it may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the written permission of the publishers

Distributed by Marketforce

 Average sales, Jan-Dec 2023 52,670 copies per issue.



Former Microsoft developer Jerry Nixon has a lot to answer for. During a tech conference in May 2015 he called Windows 10 the “last version” of the operating system. His casual remark was widely reported as a shift in Microsoft’s strategy towards Windows as a continuously updated service, rather than a one-off download.

The problem is that while Microsoft acknowledged this change, it never officially said Windows 10 would be the final version. But the damage had been done. Millions of people upgraded to it

confident they’d never need to switch again – and certainly not to Windows 11.

That, in short, is why Windows 10 is still running on around 800 million computers, despite support ending in just over 12 months. A lot of users now need to decide what to do. They should start by reading Robert Irvine’s suggestions in our Cover Feature. The first six explain how to move on, while the seventh reveals how to keep Windows 10 alive for even longer. What are your plans? Let us know.

Daniel Booth
editor@computeractive.co.uk



THIS ISSUE IN NUMBERS

74%

Point at which Windows updates always pause for one reader – [p65](#)

£25

How much you ‘owe’ in new unpaid parking fine scam – [p11](#)

140MB/s

Speed of the Netgear’s Nighthawk RS300 Wi-Fi 7 router – [p26](#)



HOW TO USE SNIPCA URLs

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren’t websites themselves, which means they won’t be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.

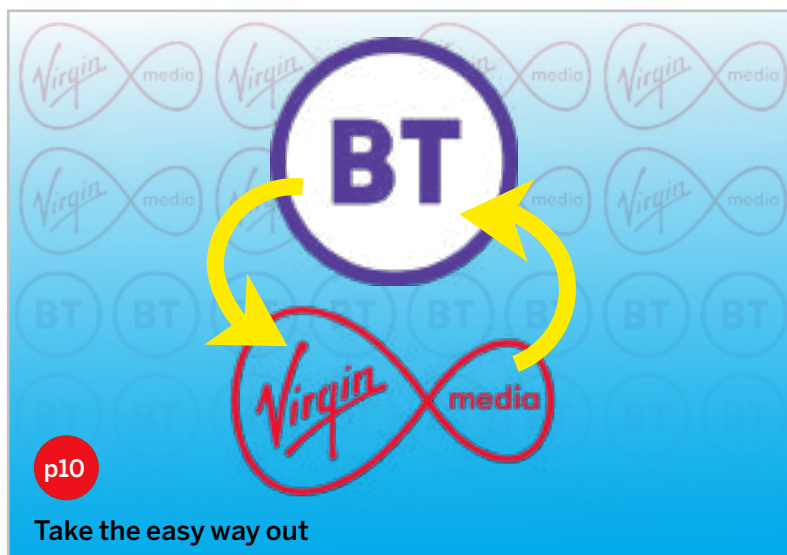
Contents

25 September – 8 October 2024 • Issue 693

- 6 News** Govt asks ISPs to offer 'up to' 8-hour battery backup
- 10 Question of the Fortnight**
Will it finally be easier to switch broadband?
- 11 Protect Your Tech**
'Unpaid parking fine' texts
- 12 Letters** Why Microsoft might 'blink' and extend Windows 10 support
- 14 Consumeractive** How 'late' does a missed appointment have to be?
- 16 Grow Your Family Tree**
Search Household Cavalry records
- 18 Best Free Software**
PDFgear 2.1.8
- 21 Named & Shamed** Marketing firm CMG claims to listen to your phone's mic

Reviews

- 22 Lenovo ThinkCentre M90a Gen 5**
Customised all-in-one PC has got it made
- 23 MSI Cubi NUC 1M**
Basic mini PC uses chip off an old block
- 24 PCSpecialist 14 Lafité AI AMD**
14in laptop is a picture of health
- 25 Samsung Smart Monitor M8**
TV-PC monitor offers double vision
- 26 Netgear Nighthawk RS300**
Wi-Fi 7 router covers all your bases
- 28 HP 325 FHD**
Budget webcam takes a dim view
- Ultimea Poseidon D50**
Soundbar system has you surrounded
- 29 Ruark Audio R1S Smart Radio**
Digital radio is a real station master
- 30 Buy It/Competition** Win a Ugreen Revodok Pro 313 docking station



Lenovo ThinkCentre M90a Gen 5

p22



PCSpecialist 14 Lafité AI AMD

p24

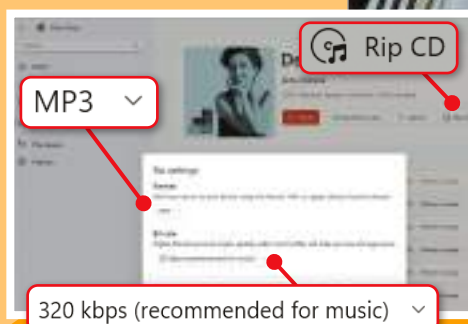


Workshops & Tips

- 35 How to... Set up a music system in your car**
- 38 Use Arc's 'spaces' tool to improve your browsing**
- 40 Readers' Tips** Use Ordnance Survey's new Locate Me tool
- 42 Browser Tips**
Chat with Google Gemini in a side panel
- 44 Phone and Tablet Tips**
Reply to emails instantly in Gmail
- 46 Make Windows Better**
Change colours of map in Weather app
- 47 Make Office Better**
Delete all formatting from Word pages
- 48 In the Club**
Create an event in WhatsApp Communities
- 49 What's All the Fuss About?**
Bluetooth 6.0
- 50 COVER FEATURE**
Windows 10 is doomed!
With time running out on the operating system, we outline your best options for a safer, smoother post-W10 future
- 60 Protect your home with a smart lock**
Keep burglars at bay with keyless tech that's convenient, affordable and secure
- 62 Record and save TV shows**
Streaming is all well and good, but we explain why recording TV and films to watch when you want puts you in control
- 64 Problems Solved**
How do I monitor my network traffic?
- 71 Reader Support**
Did Brave update stop Shields working?
- 72 Jargon Buster**
- 74 Easy When You Know How** Robert Irvine converts risky files into safe PDFs

Tyre tracks

p35



WINDOWS 10 is DOOMED!

► We explain your **SEVEN** main options – but which is right for you?



COVER
FEATURE
P50

Protect your home with a Smart lock



p60

Lose your
keys



Govt asks ISPs to offer 'up to' 8-hour battery backup

The Government has called on internet providers to offer backup batteries that last for "up to" eight hours, to help users stay online during power cuts once their landlines are replaced by digital phones.

The current copper

landlines continue working during power cuts because they can be remotely powered from the telephone exchange.

However, electricity can't pass through the fibre cables used by new digital phones, so they need an alternative source of power if there's an outage.

Most internet providers already offer battery backups to keep customers connected during power cuts, but some last much longer than others.

BT's Battery Backup Unit (pictured below), for example, provides only one hour – which is the minimum requirement stated by regulator Ofcom. However, this refers to standby time, not

actual talk time. The more you talk on the line, the quicker the battery will run out.

By contrast, Virgin Media offers an Emergency Backup Line battery for up to eight hours on standby, and one-hour talk time.

In a letter to the bosses of major providers, telecoms minister Sir Chris Bryant (pictured above right) asked them to give a "clear plan" by the end of September for "moving to best-in-class battery backup solutions, lasting up to eight hours".

He said he was "particularly concerned" about customers in rural areas who lack decent mobile signals and are "also the most likely to suffer long power outages".

Ofcom has already examined the possibility of forcing providers to ensure their street cabinets had a four-hour backup, but concluded it would cost the companies too much to install new equipment. Instead, Ofcom recommended



providers offer around four hours as "good practice".

How to get a battery backup

BT sells its battery for £85 (www.snipca.com/50033), though vulnerable customers can request a free backup unit by calling BT customer service on 0800 800 150, and by recording their vulnerabilities – such as age, disability and remote location – in their My BT account.

BT plans to launch an Advanced Battery Backup Unit later this year to "last for the full duration of most power outages" – though it doesn't give a specific time.

Virgin Media doesn't sell its Emergency Backup Line to the public, but it's available to vulnerable customers by calling 150 from a Virgin Media home phone or 0345 454 1111 from any other phone (see www.snipca.com/52065).

TalkTalk also provides a backup unit (www.snipca.com/52066), which you can ask for by calling 0345 172 0088. Sky has yet to offer one.

 Have you got a battery backup unit ready? Let us know: letters@computeractive.co.uk

WHAT WE THINK

We welcome Sir Chris Bryant raising this issue with internet providers, but we can't see Ofcom raising the minimum requirement to eight hours when it's currently just one hour. It's more likely a compromise will be agreed of two to four hours. These units will be cheaper for companies to offer to vulnerable customers. If they were forced to supply eight hours, some small providers might buckle under the cost and stop offering digital phones at all.



'DON'T MOVE CUSTOMERS UNTIL 2025'

Chris Bryant also asked internet providers not to resume moving some "non-voluntary" customers to digital for the rest of the year.

His request follows broadband firms pausing schemes that switched all customers regardless of whether they had requested it, over fears that vulnerable

people would be left with telecare systems that wouldn't work.

These concerns were the main reason the copper switch-off deadline was delayed earlier this year from December 2025 to January 2027.

Bryant said: "Safety must be our top priority, and I want to test that we have done all we can to

avoid anyone further coming to harm as a result of this process."

However, he said he's "content" with non-voluntary switches if the customers haven't used their landlines in more than 12 months because "these customers are not 'landline-users' by common understanding".



You'll like this...

Thunderbolt 5 will increase file-transfer speeds to 120Gbps (www.snipca.com/52064)



but not this...

YouTube is showing adverts when you press pause on smart TVs (www.snipca.com/52055)

EE launches its first Wi-Fi 7 home router

EE customers can now upgrade to the company's first **Wi-Fi 7** router, the Smart Hub Pro. When used with EE's new signal booster, called Smart WiFi Pro, it can deliver "gigabit Wi-Fi throughout the home" the company said.

However, it promised a minimum speed "in every room" of only 100Mbps. If it fails to hit this, you can get some money back.

Wi-Fi 7 is much faster than Wi-Fi 6, and can cope with more devices connected at the same time.

Broadband providers are now beginning to launch

Wi-Fi 7 routers for customers, while manufacturers like Netgear are making faster alternatives for around £300 (see page 26).

Both the router and the booster will be available to new customers signing up to EE's Full Fibre packages, which offer speeds up to 1.6Gbps, as well as a paid-for "add-on" for existing customers. Check if you can get Full Fibre at www.snipca.com/52044.

EE also announced a new **5G** 'standalone' phone network covering 15 cities throughout the UK (see box below). It



uses **AI** to reduce energy demand on the National Grid by putting phone cells to 'sleep' when not being used.

The network is available on EE's new All Rounder and Full Works pay-monthly mobile packages (www.snipca.com/52046).

EE said it provides "near uninterrupted outdoor coverage" and lets customers "make calls and use data in areas where it wasn't possible before".

Read more about both launches on EE's site: www.snipca.com/52045.

WHERE EE'S NEW 5G IS AVAILABLE

- | | | |
|--------------|-------------|--------------|
| • Bath | • Cardiff | • Leicester |
| • Belfast | • Edinburgh | • Liverpool |
| • Birmingham | • Glasgow | • London |
| • Bradford | • Hull | • Manchester |
| • Bristol | • Leeds | • Sheffield |

Apple adds physical button to control iPhone camera

Apple has added a physical button to its new range of iPhones that opens the camera and takes a photo or records videos.

Called the Camera Control button, it's positioned on the right of the iPhone and also lets you zoom (pictured), lock the focus and adjust exposure and **depth of field**. Applying different levels of pressure opens different options (see www.snipca.com/52042).

You can also use it to swipe through a range of photo filters without having to tap the screen.

It's similar to double-pressing the power button



on Android phones to open the camera, but with many more features.

It means you don't have to touch the screen to control the photo or video, making it easier to see what you're actually photographing or recording.

From next year, Camera

Control will also use Apple's new Visual Intelligence technology to identify objects and places you point your camera at, similar to Google Lens.

Camera Control is available on the regular iPhone 16, which starts from £799 for 128GB. It's also on the iPhone 16 Plus (£899), iPhone 16 Pro (£999) and iPhone 16 Pro Max (£1,199).

The iPhone 16 and Plus are also available in 256GB and 512GB models, while the Pro and Pro Max add 1TB versions. You can buy them all from Apple's UK store: www.apple.com/uk/iphone.

IN BRIEF

WATCH REWIND TV ON FREEVIEW

Nostalgia TV channel Rewind has launched on Freeview, letting you watch shows from the 1960s to the 90s. Available on channel 95, it includes *The Prisoner*, *Whicker's World*, *Drop the Dead Donkey* (pictured), *Jason King*, *Dick Turpin* and *The Tony Hancock Show*. It launched on Sky Q (channel 190) in May. Watch a trailer at www.snipca.com/52033.



RAKUTEN TV APP COMES TO VIRGIN

Virgin Media customers with a Stream or TV 360 box can now watch the Rakuten app on their TVs, providing access to over 150 free live channels (with adverts) and 8,000 on-demand shows and films. There's also a store where you can buy new films. It's available in the app section of the Stream or TV 360 menu.

TOMORROW'S WORLD



This woman's best mate is a robot called Neo Beta, made by Norwegian firm X1. As well as help around the home, it can give hugs and a friendly wave. At least, that's what the promotional video shows (www.snipca.com/52026). Who knows what it gets up to when the camera stops rolling?



IN BRIEF

CHROMEBOOKS GET 'SNAPPED' WINDOWS

Google has released version 128 of ChromeOS for Chromebooks, adding the Snap Groups feature which lets you show windows in split screen, similar to Snap Layouts in Windows. Also new is **OCR** in the Camera app, while the screen magnifier now follows words read aloud in ChromeVox so you never lose your place. Read Google's blog for details: www.snipca.com/52016.

FIREFOX SUPPORTS WINDOWS 7 UNTIL 2025

Mozilla has said it will continue supporting version 115 of Firefox on Windows 7, 8 and 8.1 until at least March 2025. It means Firefox is the only major browser that still releases security updates for those versions of Windows, which Microsoft has long since stopped supporting. Mozilla didn't say whether it would extend support beyond next March. About 10 per cent of Firefox users still run Windows 7, 8 or 8.1.

THE WORLD'S GONE MAD!

'Wellness' influencers say staring at the sun during dawn and dusk – an online trend called 'sungazing' – provides physical and spiritual benefits. Doctors, who probably know more about this kind of thing, say it can cause permanent eye damage. We know whose opinion we'd rather trust.



Online news sources overtake TV news for first time

More adults get their news from websites than TV for the first time, according to new Ofcom research.

Its annual study of how people consume news shows that 71 per cent do so online, up from 68 per cent in 2023 (www.snipca.com/52017). The figure for TV fell from 75 to 70 per cent in the same period.

Ofcom said the biggest driving factor is more people using social media for news. More than half of UK adults (52 per cent) now use Facebook, YouTube and Instagram to access news – up from 47 per cent in 2023.

However, there remain stark differences across age groups. Half of people aged 55-plus find news online, up from 45 per cent in 2018. Most of these visit news websites, while 82 per cent of 16-to-24-year-olds favour social media.

But despite the growth of online news, TV news is considered a better source of



reliable information – 69 per cent say it's trustworthy, much higher than the 53 per cent for online; while 74 per cent say it's of high quality, beating 56 per cent for online.

These results have prompted Ofcom to launch a review to "secure the future" of TV news and how it's made available to audiences online.

Yih-Choung Teh, Ofcom's director of strategy and research, said "we're witnessing a generational shift

to online news, which is often seen as less reliable – together with growing fears about misinformation and **deepfake** content".

He added: "Ofcom wants to secure high-quality news for the next generation, so we're kicking off a review of the public service media that help underpin the UK's democracy and public debate."



Do you prefer news online or on TV? Let us know: letters@computeractive.co.uk

Three launches 5G Outdoor Hub to boost mobile broadband

Mobile network Three has launched the 5G Outdoor Hub, which you can attach to the outside of your home to boost your mobile broadband connection.

Three says it "hooks on to the strongest 5G signals available in your area" and then connects to an Amazon Eero router indoors to provide internet coverage.

Three says that you can install the Hub yourself, without a visit from an engineer. Its website gives three options for installing the device outside: on a pole, window or wall (pictured).

You have to feed the cable inside your home through a closed window.

You also need to wire the Hub up to a power supply, probably by drilling holes through walls, and connect the Eero 6 router – which comes as part of the package.

The company says you can expect "average download speeds of 150Mbps", though this will vary greatly depending upon your location, where you place the Hub, and the capacity of your local 5G phone mast.

The Hub is available in Three's 24-month Outdoor



Home Broadband plan, which costs £12 for the first six months, before doubling for the remaining term.

Data is unlimited, though monthly prices will rise by £2 every April.

Make it easy to disable stolen phones, Govt tells tech firms

The Government wants phone manufacturers to make it easier for victims to disable their stolen devices, following a sharp rise in thefts.

There were an estimated 78,000 'snatch thefts' in the 12 months to March 2024, up from 31,000. These are defined as items like phones, bags and wallets being taken without the thief using force or the victim being threatened.

Less than one per cent of police investigations resulted in a person being charged, while almost 82 per cent were closed without officers finding a suspect.

Ministers said a growing demand for second-hand phones in the UK and abroad has driven the rise in thefts. Unless a stolen phone is permanently disabled, it can be used by a new owner if sold to them.

The Home Office plans to host a summit of phone



companies to discuss innovations that could help stop the reselling of devices.

Police chiefs have also been told to gather more intelligence on who is stealing phones and where they're being resold.

Efforts could include extra police in areas experiencing more thefts and violence, including robberies at knife-point.

Commander Richard Smith of the National Police Chiefs' Council said it was impossible to "arrest our way out of

this problem". He added:

"Manufacturers and the tech industry have an important role in reducing opportunities for criminals to benefit from the re-sale of stolen handsets."

Policing Minister Dame Diana Johnson said by working together the Government, tech companies and police can "break the business model of the phone thieves and moped gangs who rely on this trade".



Have you ever had your phone stolen? Let us know: letters@computeractive.co.uk

Scam 'companies' that tricked pensioners are shut down

Two companies that tricked pensioners into paying to fix non-existent security problems on their computers have been shut down.

Scammers from DT Care Ltd and Amolin Solution Limited phoned victims pretending to be from major tech companies like Microsoft, and persuaded them to provide remote access to their machines.

They carried out tasks that made it look like they were fixing the problems, then charged victims – most of whom were in their 70s and 80s – up to £400.

They even sent unwanted

parcels to the victims to suggest they had actually carried out a genuine service. In one example, DT Care sent two paperback novels, a mousepad and a wind chime, none of which the victim ordered.

Both firms were registered in the UK – DT Care Ltd in Droitwich, Worcestershire, and Amolin Solution Limited in Sedlescombe, East Sussex – but the Insolvency Service said they had provided false details to Companies House and were probably being run from India.

David Usher, a chief



investigator at the service, said the fraudsters' tactics were "thoroughly dishonest and designed to be aggressive and intimidating".

"The two winding-up orders secured should send a strong signal to the business community that we will use all the powers at our disposal to shut you down if you prey on some of the most vulnerable people in society," he added.

IN BRIEF

TOSHIBA LAUNCHES FIRST FREELY TVs

Toshiba has launched its first TVs offering the streaming service Freely, which is the long-term replacement for Freesat and Freeview. The new UV2F range has four sets, all 4K: 43in (£239), 50in (£299, pictured below), 55in (£329) and 65in (£399). They're currently available only from Argos: www.snipca.com/51954.



ROAM FOR FREE UNTIL 2026 WITH TESCO

Tesco Mobile has extended free EU roaming until 2026, meaning you can use UK minutes, texts and data without paying any fees. Tesco Mobile is an MVNO that piggybacks on O2's network, which also offers free roaming in the EU. For details and locations covered visit www.snipca.com/51950.



WATCH REBRANDED UKTV APP ON SKY

Sky Glass and Stream viewers can now watch shows through the U app, which is the new name for UKTV Play. It gives access to more shows than UKTV's channels or Sky's catch-up service. However, you'll need to create a separate U account and you can't avoid adverts even if you pay for Sky's advert-skipping 'fast-forward' package. For more info visit www.snipca.com/51961.

Question of the Fortnight

Will it finally be easier to switch broadband?

Ofcom's system for moving between networks has finally launched

Since 2015, it's been easy to switch broadband providers. Ofcom's rules meant you only had to contact the company you're switching to, and it then got in touch with the company you're leaving to organise the move.

However, this worked only if the two providers used the same cable infrastructure to supply the internet.

This works fine for switching from BT to Sky or from TalkTalk to Zen Internet because they all use Openreach's network. But it didn't cover switching *between* networks, such as from Openreach to Virgin Media, or from either to smaller, regional networks like CityFibre. You still had to contact both companies yourself and try to coordinate the perfect time to switch to minimise the length of time without a connection.



If you're happy with these, inform your new provider and it'll manage your move from start to finish. The rules also stop old and new services overlapping, so you pay for one or the other only.

Any loss of service that results from the switch must not exceed one working day. If

choice" by switching to a better deal, or threatening to switch and getting a better deal from their existing provider.

It claims this has already happened in recent years following 2015's rule change, with average prices for superfast (30Mbps and above) broadband falling from £48.71 in 2018 to £42.28 in 2023 – though customers are more likely to have noticed recent mid-contract price rises that were far above inflation.

Virgin Media's 5.7 million customers stand to benefit the most, because for the first time they'll be able to quickly switch to any provider on Openreach (ie, BT, Sky, Plusnet, TalkTalk, Zen and more) – assuming, of course, both networks are available in their area. This competition might force Virgin to cut prices too.

However, there are some doubts that the industry is ready for mass switching. Providers have been trialling it since July with some success, but warn that some switch-overs will still fail because

THE FACTS

- Ofcom has launched its One Touch Switch scheme to make it easier to switch between broadband providers on different networks, such as from Openreach to Virgin Media
- It means you need to only contact the provider you're moving to in order to switch
- You've already been able to switch this way between providers on Openreach's network since 2015

companies won't be able to match customer information.

As a backup, Ofcom is keeping the old system for six weeks, though providers must still use One Touch Switch in the first instance and Ofcom expects "most switches will happen through the new process".

TOTSCO (<https://totsco.org.uk>), the organisation managing the system, said the launch had gone "smoothly". More than 4,200 customers placed "switch orders" on the first day, of which 271 were completed.

There are also doubts about how many customers will be motivated to switch. Recent Ofcom figures show that 40 per cent have never moved providers, whether because they're happy with their existing service or simply can't be bothered. If this figure falls sharply over the next year, it'll be because customers are leaving or joining Virgin in droves.

“Tell your new provider you want to switch and it'll manage your move from start to finish”

Ofcom and providers said fast switching between networks was harder to set up – and so it has proved. But the One Touch Switch system finally launched on 12 September, meaning you now just need to contact your new provider and it will ask your old one to send you any relevant details, such as any early-termination charges you have to pay and any impact on other services you use (see www.snipca.com/52069).

it does, you'll receive £6.10 automatic compensation for each day of delay, including the missed start date (see www.snipca.com/52070). If a switch fails to happen for whatever reason, the existing provider must reactivate all the services it was offering, including the phone number.

Ofcom hopes the new system will lead to lower prices, as customers learn to "take advantage of unprecedented levels of

Protect your tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

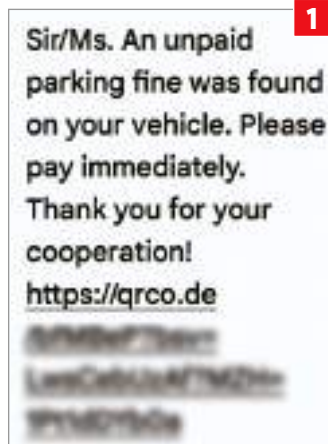
'Unpaid parking fine' texts

What's the threat?

Scammers are sending text messages claiming that an unpaid parking fine was found on your vehicle. They come from random phone numbers and urge you to "pay immediately" by tapping a link that begins 'qrco.de' (see screenshot **1**). This generates a QR code which, if scanned, brings up a site that impersonates the official Gov.uk government website for paying a parking fine.

Researchers at consumer group Which? said the fake site uses the official Gov.UK logo and font to look convincing (see screenshot **2**), and asks you to enter your registration number. No matter what you type in the box – whether a genuine number plate or random characters – you're told you owe £25. It also lists your location, suggesting that the scammers know your IP address.

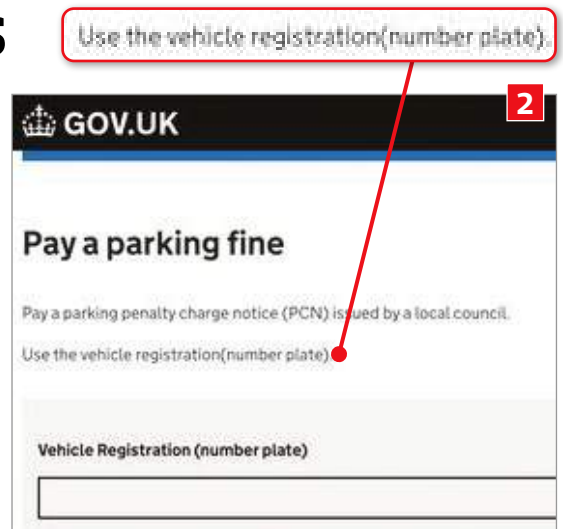
You're then asked for more personal details, including name, email and home address and phone number, and to pay



using your bank card.

How can you stay safe?

Parking fines can't be paid by text message, so ignore any texted demands you receive. Instead, visit the official Gov.UK page at www.gov.uk/parking-tickets, where you'll find information on paying and challenging fines.



On the official 'Pay a parking fine' page (www.gov.uk/pay-parking-fine) you're asked to enter your council's postcode, not your registration number.

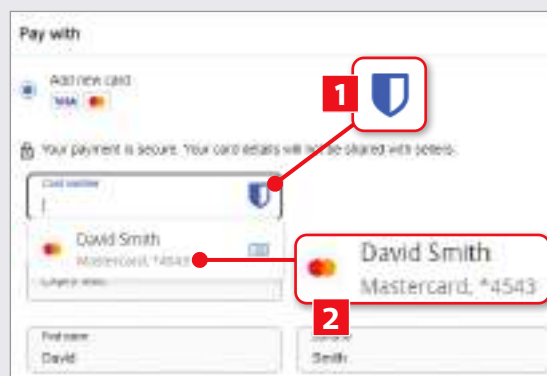
Also, even the most convincing scams can have small errors. Note how there's no space between 'Vehicle registration' and '(number plate)' on the fake Gov.UK website pictured above.

New tools

Autofill payment card with Bitwarden
www.snipca.com/51977

Our favourite password manager Bitwarden can now automatically fill in your payment-card details when its browser extension detects that you're making a payment. Previously, you had to trigger this by clicking the extension's icon or pressing the keyboard shortcut Ctrl+Shift+L.

First, though, you need to add a card to Bitwarden's vault. Install the extension from www.snipca.com/51981, then open it and click the top-right plus (+) symbol. Now select Card in the Login dropdown menu, then fill in the details of your card before clicking Save at the top right. You'll now see it listed under the Cards heading.



The next time you pay for something, look for and click Bitwarden's blue shield in the 'Card number' box (**1** in our screenshot). Now click the card you want to use (**2** and your number, security code and name will be filled in. For more information visit Bitwarden's blog: www.snipca.com/51977.

ScamWatch

Readers warn readers



'Assessed' for 25% discount

Out of the blue I received a call claiming to be from my mobile-phone provider telling me I had been "assessed" for a 25-per-cent discount on all my calls, messages and data. The caller then asked if I wanted to be credited with it. All I needed to confirm to him was my email address, home address and full name. When I provided these, he then requested my bank details. When I said that my mobile network should already have these, he became tetchy and impatient. It dawned on me it was a scam, so I hung up without saying anything else.

Gordon Bottomley



Warn your fellow readers about scams at letters@computeractive.co.uk

Letters

Tell us what's on your mind

VPNs need to fix their email problems

 I totally agree with the sentiment of Issue 692's Cover Feature ('Why you must use a VPN', pictured right). However, VPNs need to be better constructed than they are at present. I've had intermittent email problems both on my PCs and my iPad whereby using a VPN crashes the email sent. My messages are either put in the Outbox, or I get warnings telling me my email address is incorrect. And on some occasions it tells me my email password is not correct.

These problems disappear if I turn off the VPN. This is frustrating – any VPN ought to be able to cope with either Outlook or Apple Mail. When I spoke to BT they said they were receiving more calls about email problems which were solved by turning off the VPN.

One solution is to change your location in the VPN's settings. I had a strange situation when looking into an email blockage for a friend, but couldn't trace it. I phoned the VPN's developer, who asked me to reset the location from Glasgow to London. This worked straight away.

We have to get VPNs fine-tuned so they work out of the box. Currently, people are switching between having it on or off – and that's dangerous.

Brian Cameron

Google moved me to the Netherlands when I used a VPN

 I was delighted to read Issue 692's Cover Feature on VPNs. Thanks to *Computeractive*'s recommendation, I've been using the free Proton VPN and its **kill switch** for quite a few months now. This defaults to an **IP address** in the Netherlands which has a few



consequences I wasn't expecting: these include some UK-only sites no longer working, and adverts in Outlook appearing in Dutch (making them easy to spot).

But perhaps most significantly, Google emailed me to say they were changing my location to the Netherlands and that I could submit a form to contest this.

I did this, and now await Google's response. However, this does raise concerns that using a VPN, particularly one that's some distance from your actual location (as most free ones are, and indeed as this is often desirable), might put you at risk of investigation, or having services blocked and needing to prove who you are.

I've not used any banking apps with the VPN, but I imagine that in a worst-case scenario, you could have your accounts blocked due to suspicious activity.

Geoff Burgess

CA SAYS We agree with both Brian and Geoff that there are problems associated with VPNs and they're far from perfect. But these are outweighed by the considerable benefits, such as keeping your personal details private, blocking adverts and trackers, and unblocking TV services from other countries. We explained how to do all these in Issue 692's Cover Feature – buy a back issue from www.snipca.com/52007.

It's true: tech firms deliberately make their services worse

 There's been much debate recently about tech companies making their services worse. Some readers have speculated that this is a deliberate business ploy – ie, releasing a high-quality service to attract customers, then gradually making it worse over time to save costs and serve only their business users, who of course pay more.

There's no secret about this ploy. It even has a name, which I think *Computeractive* will have to censor: Ens***tification. There's even a Wikipedia page explaining how it works: www.snipca.com/51992.

I was reminded of this when reading in Issue 692 (page 6) about the BBC forcing EE to stop customers recording shows to their boxes. I'm one of those customers, and I recorded about 10 shows every week until being prevented from doing so. I'm now in the ridiculous situation where, in 2024, it's harder for me to record shows than it was in 1984 on my Betamax video recorder.

Derek Lawson

CA SAYS The word Derek refers to isn't pretty, but it powerfully sums up what's happening to many online services, whether it's Amazon and Google shoving their search results below adverts or Netflix charging you to share passwords despite turning a blind eye for years. But it's perhaps most irritating when broadcasters axe options that viewers

What's the Issue...?

 I seem to recall a Cover Feature about uninstalling Windows features you don't need. When was that, please?

Sam Francis

CA SAYS In Issue 652, published in March 2023.

 I can't remember the name of the software that checks whether your **SSD** is fake. Can you remind me?

David Earnshaw

CA SAYS Yes, it's **ChipGenius** – see Issue 663, page 20. Read it and the feature above on our Back Issue CD: www.snipca.com/48860.

 I'm beginning to find ChatGPT a better option than Google for answering questions. When was your feature on this?

Dan Gilham

CA SAYS In Issue 682, page 60. Buy a back issue from www.snipca.com/51988.

Computeractive is a member of the Independent Press Standards Organisation (which regulates the UK's magazine and newspaper industry). We abide by the Editors' Code of Practice and are committed to upholding the highest standards of journalism.



If you think that we have not met those standards and want to make a complaint please contact editor@computeractive.co.uk. If we are unable to resolve your complaint, or if you would like more information about IPSO or the Editors' Code, contact IPSO on 0300 123 2220 or visit www.ipso.co.uk.

have been relying on to download and record shows. Thankfully, some workarounds remain, as we explain on page 62.

I can't recycle USB sticks on foot

On the final page of Issue 691's Cover Feature ('Make your USB sticks last forever'), you advise people to get rid of dead sticks at their nearest recycling centre. The website you refer to (www.snipca.com/51692) does indeed suggest my local recycling centre here in town, and they do accept dead sticks. But recycling centres in most parts of Scotland (I live in Fife) don't allow access unless you come by car.

This means if I turn up with a USB stick on foot, I'll be turned away at the gate. Therefore, those of us without a car have no alternative but to put small electrical items into landfill. Not something we want to do. How crazy is that?

Jorgen Stepputat

Linux made my laptop virtually useless

Following recent letters on what to do when Microsoft ends support for Windows 10, I decided to install Linux Zorin (<https://zorin.com/os>) on my old Windows laptop as it was supposedly easy to set up. I got it working just fine, though I had to use a cable connection to my modem. However, there was no interface for accessing Wi-Fi settings, and I found it impossible to set it up without resorting to the **command line**, so I abandoned it.

It seems that other Linux **distros** have similar issues. Surely the designers should realise that without Wi-Fi a laptop is virtually useless and therefore should be easy to set up via an interface. Until that is so, I suspect Linux will continue to be the preserve of a small minority.

David Smith

You can't take landlines down the pub

Arthur Hobson may well not have dropped his landline phone down the loo or lost it down the back of his sofa or had it stolen (Letters, Issue 691), but he can't just put it in his pocket and take it to the pub or shops, and certainly not on a world tour. Just think of all those potential missed calls. I take my mobile everywhere. Yes, even to the loo.

David Eaglesham

STAR LETTER

Why Microsoft might 'blink' and extend Windows 10 support

You hit the nail on the head in Issue 692's 'Question of the Fortnight' (pictured) when you wondered whether Microsoft would end support for Windows 10 next year if it's still running on over one billion computers. I think the symbolic figure will be 50 per cent. If Windows 10 is still running on half of Windows computers, then it'll be hard – if not impossible – for Microsoft to justify ending support.

To get an idea of Windows 10's enduring popularity, you only have to look at how unpopular previous versions were as their demise loomed. In April 2014, when Microsoft ended support for XP, only 19 per cent of computers ran it. In January 2020, when the plug was pulled on Windows 7, 25 per cent ran it (you can find these figures at <https://gs.statcounter.com>).

With Windows 10 currently at 64 per cent, I can't see its market share sliding to the levels of 7 and XP by October 2025, let alone below 50 per cent. Between September 2023 and 2024 it fell only from 71 per cent to 64 per cent, so its rate of decline is hardly spectacular.



Come next October we could have a stand-off between Microsoft and Windows users. If enough of the latter hold firm and stick with Windows 10, then Microsoft might blink and extend support.

James Love

CA SAYS We take James's point, especially on the pressure Microsoft will face to extend support if Windows 10 continues to run on more than half of computers. But doing so would be a humiliating U-turn for the company. We still think it's sensible to assume support will end and to take action now – as we explain in our Cover Feature on page 50.



The **Star Letter** writer wins a **Computeractive** mug!

We always negotiate cheaper deals with Vodafone

I was interested to read Issue 690's Cover Feature 'Cancel your phone contract'. We have a home phone, two mobiles and broadband with Vodafone and always buy our phones and iPads directly from Apple. We therefore have **SIM-only** contracts for our phones.

Every time our broadband or SIM-only contracts are up for renewal we always go

into a Vodafone high-street shop and ask what they can do. This works. I've always been able to negotiate a better deal at a good price instead of just accepting the offer emailed to me. Their high-street store staff have always been very helpful. Best not to go in on a Saturday though.

Peter Turner

CA SAYS We've had many emails recently from readers saying they regularly negotiate deals when their SIM-only contracts are due to expire. In particular, the big four networks (EE, O2, Three and Vodafone) are having to fight off competition from the smaller **MVNOs** who piggyback on their network. We revealed the best deals you can get in Issue 690's Cover Feature, available as a back issue from www.snipca.com/51784.





We stand up for your legal rights

How 'late' does a missed appointment have to be?

Q After months of slow broadband speeds, Openreach booked a two-hour slot (8am to 10am) for an engineer to visit. I was still waiting by 11am, at which point I had to leave the house for a hospital appointment. This made me wonder how long after the slot ends an appointment is considered 'missed', entitling me to compensation under Ofcom's scheme. Do I have to be left waiting for a certain amount of time?

Rupert Winthrop

A Ofcom doesn't state that you have to wait a minimum period after the appointment slot ends, so strictly speaking you're entitled to compensation if your engineer is just one minute late. However, you need to take into account what's considered fair and reasonable. Some customers would be happy to allow an engineer to start work if they were 'only' 10 minutes late, for example.

In Rupert's case, however, one hour after the two-hour appointment window is definitely too late, and he is due automatic compensation under Ofcom's



scheme. This entitles you to £30.49 for a missed appointment, as Ofcom explains at www.snipca.com/51997. You're also due this if an engineer cancels with less than 24 hours' notice.

You should receive your compensation no later than 30 calendar days after the date of the missed appointment, and it will be credited on your bill. Ofcom says internet providers have their own systems for recording missed appointments, but in our experience you shouldn't assume it has been successfully logged on your account. We'd always advise phoning your provider to confirm the missed appointment and to check that you'll receive compensation.

CASE CLOSED

Should Klarna refund my Argos warranty?

Q I bought a new PC from Argos in August, paying £154.99 for the extended warranty. However, Argos couldn't deliver it to my address in Northern Ireland, so I cancelled the order. I paid using Klarna, which took out £319.99. I've received a refund of £163 but am still owed £154.99 for the warranty. Klarna says the refund is complete, and I can't get anyone at Argos to help. Can you do anything for me?

Billy Hamilton

A Hopefully, yes. Billy is entitled to a full refund. The problem is that Klarna has received instructions from Argos to refund only £163.

Klarna is a 'buy now pay later' payment provider, similar to PayPal credit. Billy said he chose to pay in three monthly instalments, but we can't work out how Argos came to the figure of £163 for the refund, nor why Klarna took only £319.99 for the first instalment.

The confusion is probably over which company sold Billy the warranty. If it was Argos, we should be able to resolve the case without difficulty. We'll check with Billy and take our investigation from there.

CASE ONGOING

CASE UPDATE

Customers moved to new ISP can't cancel without a fee



Telecoms regulator Ofcom has confirmed to us that you don't have the automatic right to cancel your broadband contract

without paying a fee if the company you're with has been bought by another.

We checked this because reader Malcolm Lee was unhappy about being moved to TalkTalk after Octopus Energy bought his previous provider Shell Energy last December (see Issue 692).

Malcolm was angry that he hadn't been

TalkTalk

told about the move, and that Octopus Energy hadn't sought permission. But Ofcom says he can still cancel early if TalkTalk makes a change to his contract that "is not to the customer's benefit". This is because when a company buys another it must abide by the existing terms and conditions.

We've asked Malcolm to check whether TalkTalk has altered his contract. Also, like all customers, he can cancel if TalkTalk simply doesn't provide the service outlined in that contract. He should therefore also check he's getting the speed he's paying for.

Ofcom suggested that Malcolm should speak to TalkTalk in order to reach a compromise. This might work, because TalkTalk won't want a disgruntled customer on its hands. Or he could use his position as a means to negotiate a better deal.

Contact us so we can investigate your case

 **Email:** consumeractive@computeractive.co.uk
Please include your name, phone number and address.

Can you tell Virgin to restore my landline?

Q My Virgin landline went down on 6 August, and it still hasn't been fixed, despite two engineers coming out and telling me different stories. I know the problem is at Virgin's end. Can you help me find out what's going on?

Dorothea Scott

A This is a case of customer service gone badly awry, although Virgin has now compensated Dorothea. The company initially offered her £35 for the loss of service, but she argued that she should be

compensated for the cable she had to buy and the mess the engineers had made of her complaint. Virgin has now agreed to give her £75.

It seems the problem began after Dorothea's landline was switched to VoIP in early August. After multiple visits from engineers, none of which fixed the problem, Dorothea realised the fault lay in the cable Virgin had supplied.



She had to buy a new one to get her landline back.

While Dorothea is happy with the refund, it took an email to Virgin's CEO, Lutz Scheler (lutz.scheler@virginmedia.co.uk), for this to materialise. Like many readers, she found that it pays to go straight to the top.

If you don't know how

to contact a CEO, try searching at www.ceoemail.com.

CASE CLOSED

Fitbit hasn't arrived, so why isn't Google refunding me?

Q Google was advertising a limited sale of some Fitbit watches, so I bought one for my wife. DPD was supposed to deliver it on 12 or 13 August, but it didn't arrive. Google told me I had to contact DPD, but DPD said I needed to talk to Google. Then Google said it had proof the Fitbit had been

delivered and was closing my case with no refund or replacement. Can it do this?

Jerry Neild

A No it can't. Thankfully since Jerry emailed us the Fitbit has turned up, so we don't need to chase Google, but we'll still tell the company that it shouldn't have told Jerry to contact DPD. Google is the retailer in this case and had full responsibility to get the item delivered – paying DPD to do so.



The 'proof' Google showed Jerry was a photo of the Fitbit outside a neighbour's door. Jerry could have used this to show that the item hadn't arrived at the right address. It's because of mistakes like

these that we'd advise against telling a courier to deliver an item to a designated 'safe space'. If you do this and the parcel is delivered to the wrong address or is stolen, you can't go back to the courier for help.

The only course of action available to you is to contact the police.

CASE CLOSED

CREDIT WHERE IT'S DUE

PCSpecialist makes it easy to build your own computer

 I agree with Graham Rice (Letters, Issue 691)

that tech manufacturers are increasingly dictating to us which components we should have in our devices. But I must recommend PCSpecialist's online tool for configuring custom-built computers (pictured). It's easy to use and tells you if any of the



components you choose are incompatible.

PCSpecialist keeps you informed while building the PC, delivers on time and has fantastic customer service.

I recently made my third

purchase from the company – a 17in laptop

 Has a company impressed you with its customer service? Please let us know: editor@computeractive.co.uk

running Windows 11, with an Intel Core i7 processor, SSD, DVD writer, illuminated keyboard and lots of ports. It's an all-round excellent laptop and costs less than £1,000.

Peter Oakden

Contact
PCSpecialist

• **Email** enquiries@pcspecialist.co.uk
• **Phone** 0333 011 7000

Grow Your Family Tree



If your ancestors served in the British Army's senior regiments, follow **Judith Batchelor** tips to...

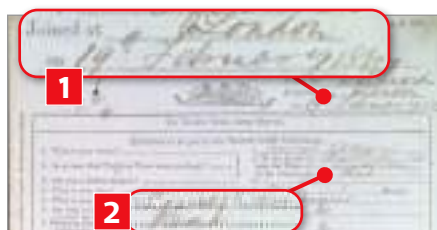
Search Household Cavalry records

Formed in 1661 by Charles II, the Household Cavalry comprises the two most senior regiments of the British Army: the Life Guards and the Blues and Royals. Historically, they were the 1st and 2nd Life Guards, the Royal Horse Guards (The Blues) and the 1st (Royal) Dragoons. Mounted on horseback in their colourful uniforms, they guard the King on ceremonial occasions and serve in reconnaissance and peace-keeping roles around the world.

Browse records at the National Archives

You'll find service records for non-commissioned officers and other ranks discharged between 1799-1920, who served in the Life Guards, the Royal Horse Guards and the Household Battalion (formed in 1916 from the reserves of the Household Cavalry), in series WO 400 at the National Archives. Subscribers can download them without any extra cost, while non-members will have to pay £3.50.

Before starting your research, read the National Archives' research guide (www.snipca.com/51926). Scroll to the bottom and type a person's name, and their regimental number if you know it. Note that no record will be found if the soldier



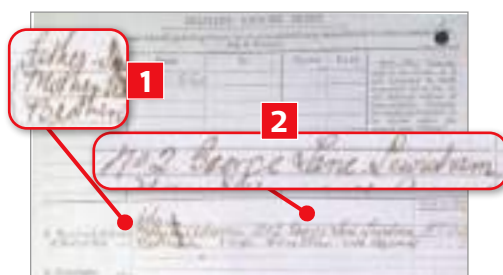
Judith found that James Adams joined the Life Guards in 1884 and was born in Lewisham...

was transferred to another regiment of the British Army, because their records would have gone with them.

Among the 11,500 service records, I found those belonging to James Adams, a cavalryman in the 2nd Life Guards with the regimental number 1282. The first page of the long service attestation form shows that Adams joined the 2nd Life Guards on 19 February 1884 in London (1 in our screenshot above), and was born in Lewisham, Kent (2).

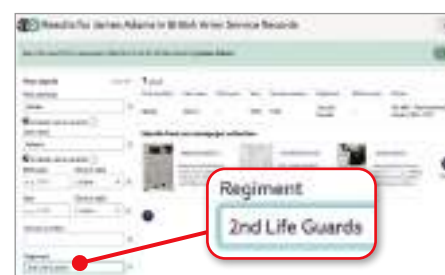
The second page named his father, mother and brother as next of kin (1 in our screenshot above right), all living at No.2, George Lane, Lewisham (2). I also found details of his marriage, and that he was discharged from the Army on 1 March 1905.

Findmypast subscribers can access the same records as part of its British Army



...and his father, mother and brother were named as his next of kin

Service Records (www.snipca.com/51930). When searching, it helps if you know the specific regiment your ancestor was in. I only found the records of James Adams when I searched for 2nd Life Guards in the Regiment box (see screenshot below), not just Life Guards.



Include the specific regiment name when searching Findmypast's British Army Service Records

Your Genealogy Problems Solved

I'm researching a memorial which gives the date of death and age, but the name isn't readable. Is there anywhere I can search using the full date of death rather than just the year? I might then be able to narrow results by trying potential surnames.

Martyn Sandford

The majority of records have been indexed by name, rather than by date, certainly at a national level. If only the date

of death and age were readable on the memorial, check to see if any monumental inscriptions were previously made, perhaps by a local family history society. Alternatively, if the memorial is in a cemetery, search for day books online. Also visit www.findagrave.com and search by year of death and location.



Have a genealogy question for Judith? Email letters@computeractive.co.uk with 'Grow Your Family Tree' in the subject line.

Pay for specialist research

For £35 you can pay volunteers at the Household Cavalry Museum to search its archives. This is non-refundable: you'll still need to pay it even if they don't find any information. If they do find records, you'll have to pay an extra £15 for copying, packaging and postage. For details visit www.snipca.com/51966.

The Royal Dragoon Guards Museum also provides a research service, which costs a non-refundable £15 (www.snipca.com/51967). Alternatively, search the National Archives' Royal Dragoon records at www.snipca.com/51968.



CONNECT AND COLLABORATE WITH EASE



The **ProLite XUB2790QSUH** is not only a great monitor for communication, but also for productivity and comfort.

This 27-inch IPS monitor is the perfect choice for remote workers who need a high-quality display and a seamless connection. It has a built-in 1080p webcam and microphone that are compatible with Windows Hello, so you can log in with just a glance and start video conferencing in seconds. It also has built-in speakers that deliver clear and crisp sound for your calls and entertainment. This Full HD monitor features an height adjustable stand with swivel function, flicker-free LEDs and a blue light reducer that reduce eye strain and fatigue, so you can work every day without discomfort.



Best Free Software

Robert Irvine recommends new programs that won't cost you a thing

PDF EDITOR

PDFgear 2.1.8

www.snipca.com/52022

What you need: Windows 10 or 11, or macOS

PDFgear was one of our favourite discoveries of 2023, and *Computeractive* readers' fifth most-downloaded program of the year – see our Cover Feature in Issue 674 (page 53). But other than a few small tweaks, it's been fairly quiet in 2024 – until now. Version 2.1.8 brings a host of superb new tools and improvements to the brilliant PDF software. These make PDFgear an even stronger rival to Adobe Acrobat, especially when you consider that it's still completely free.

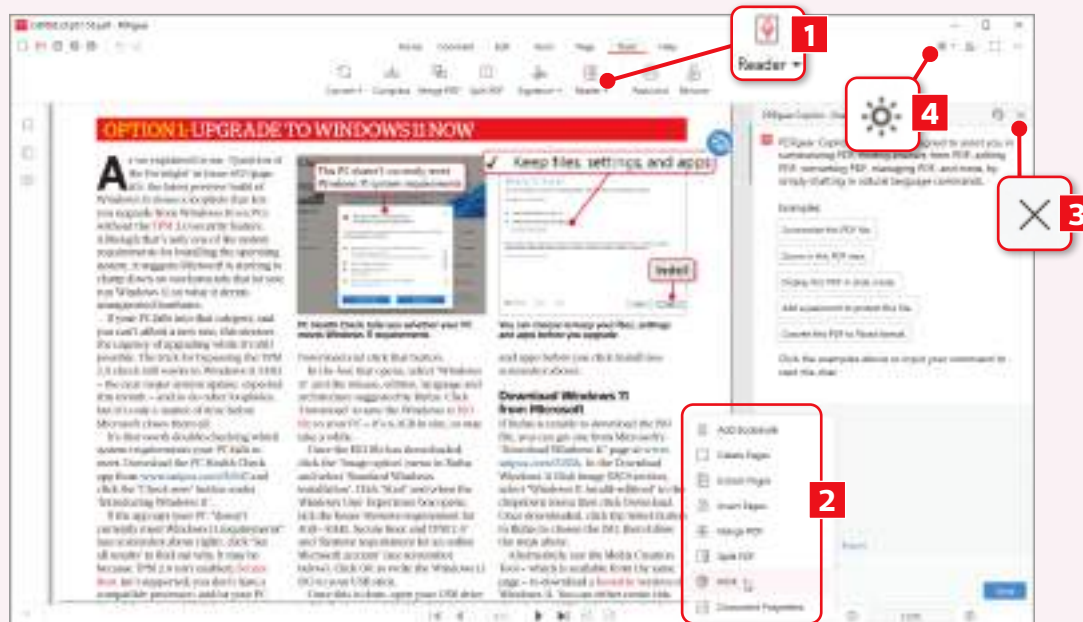
Perhaps the most exciting addition is the ability to create your own PDFs as well as edit existing ones. Click the New PDF button on the home screen or in the top-left corner of the PDF editor to open a blank page. This allows you to add your own text, images and other elements, including watermarks, stamps and signatures.

Another big new feature reads aloud the text from your PDFs, which is useful if you're visually impaired or simply want to hear the content read to you while you get on

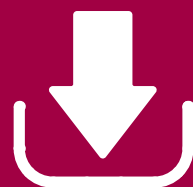
with other tasks. To use this option, click the Tools tab, then the Reader button and press Play. You can adjust the volume, speed and pitch of the spoken text, and switch between an English and American voice.

PDFgear has made it easier to browse long documents by adding an auto-scroll feature. Simply press the middle button on your mouse, then move the mouse itself to begin scrolling. It also now lets you access essential options such as Delete Pages, Split PDF and Print, by right-clicking a page.

Other improvements in PDFgear 2.1.8 include automatically saving your print preferences, so you don't need to configure them each time; pop-up prompts that explain how to use the Screenshot and OCR tools (these appear when you click the relevant toolbar buttons); and the choice between converting to a single spreadsheet or multiple sheets when using the 'PDF to Excel' option.



- 1** PDFgear's new Reader mode lets you hear the text in PDFs read aloud. With multi-page documents, click the down arrow next to the Reader button to specify whether the tool reads all pages in the PDF or only the current one.
- 2** Rather than click tabs and toolbar buttons to find the options you need, you can now access many of them faster by right-clicking a page. These include splitting, merging and printing PDFs; and extracting, deleting and inserting pages.
- 3** If you don't like PDFgear's AI chatbot, Copilot (unrelated to Microsoft's tool), either close its side panel by clicking the 'X' or permanently disable it. Click the Help tab followed by Settings, then switch off 'Enable PDFgear Copilot' and click OK.
- 4** PDFgear offers several ways to reduce eye strain when you're viewing and editing documents. Click the Appearance button in the top-right corner and choose between Night Mode, Eye Protection Mode and Yellow Background.



SYSTEM TOOL

Microsoft PowerToys 0.84.1

www.snipca.com/52018

What you need: Windows 10 or 11

Microsoft's brilliant free system-utility suite has added its first big new feature for ages, called Workspaces. This lets you save a set of programs in a custom layout – or 'workspace' – which you can launch with a single click. It's handy for keeping work-related software separate from personal-use programs, and for having different workspaces on dual monitors. Workspaces is enabled by default in PowerToys – press Windows key+Ctrl+' (apostrophe) to launch the Workspaces Editor, or select Workspaces then 'Launch editor' in PowerToys Settings. Click 'Create Workspace' to capture your current view (open programs you want to appear in the layout, close those you don't and move others around). Tick the box to create a desktop shortcut to the workspace (see screenshot) and click Save Workspace.



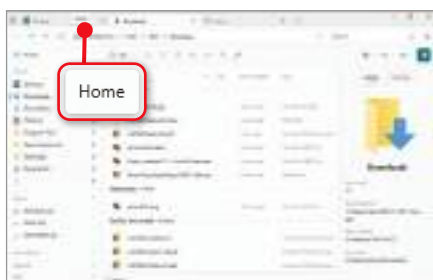
FILE MANAGER

Files 3.7

www.snipca.com/52021

What you need: Windows 10 or 11

Our favourite File Explorer alternative has been updated again, with several welcome upgrades. To improve navigation, you can now right-click the



Back and Forward buttons on the toolbar to see all the folders and sub-folders you've opened – select a folder to jump straight to that location. Files has also introduced an optional Home button for the toolbar (see screenshot), which instantly returns you to your home screen. To enable this, click the Settings cog, choose Appearance and switch on 'Show home button on toolbar'. Create a keyboard shortcut for this action by choosing Actions, then 'Add command' and selecting 'Home'. Additionally, you can now hide the Files icon in your system tray – to do so, choose Advanced in Settings and disable 'Show Files icon in the System Tray'. As always with Files, click the 'classic installer' link to download it for free.

£ SHOULD I PAY FOR...?

Choose the right version of software

Duplicate Cleaner Pro

www.snipca.com/52024

Price: £41.95 **Free trial period:** 7 days

What you need: Windows 7, 8.1, 10 or 11

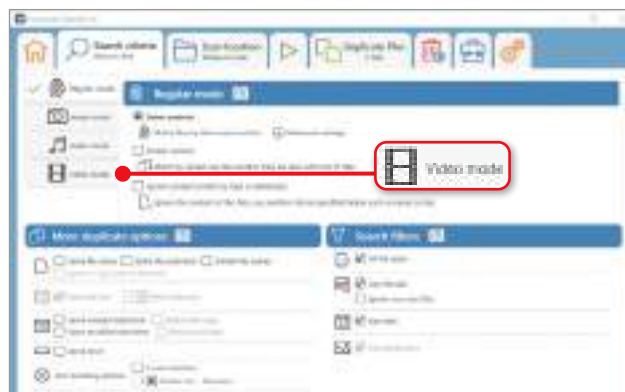
Duplicate files waste valuable space on your hard drive, and slow down system scans, but removing them all is no easy task. Duplicate Cleaner does the hard work for you, but there are significant differences between its Free and Pro versions.

Both have a simple interface that makes it easy to specify what type of duplicates to scan for, where to look and how closely to compare files – be it by content, name, size or date. Scans are equally speedy in both editions and results are clearly presented, so you can quickly choose which duplicates to delete – either manually or using the 'Selection assistant' – before clicking 'File removal'.

Unlike some **freemium** duplicate cleaners, there's no limit on the number of files you can find and delete, but the Pro version goes further and deeper with its scans. Its 'Image mode' can identify similar pictures even if they've been resized, rotated or flipped, and also checks their **metadata** for location and time details.

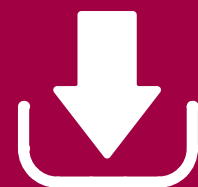
Likewise, the 'Audio mode' can identify similar-sounding audio files and the new 'Video mode' (see screenshot) applies the same forensic analysis to videos, by looking for matching frames, thumbnails and soundtracks.

The paid-for version can also scan ZIP files for duplicates, find copies of folders and turn duplicates into 'hard links' that redirect to the original files.



OUR VERDICT: Don't pay for it

Duplicate Cleaner Pro provides lots of good reasons to upgrade, but it's pretty expensive and you can get most of its features – other than advanced analysis of audio and video files – in the free program AllDup (www.snipca.com/52027).



What should I download?

We advise you which software and apps to use

Can I edit InDesign files in another program?

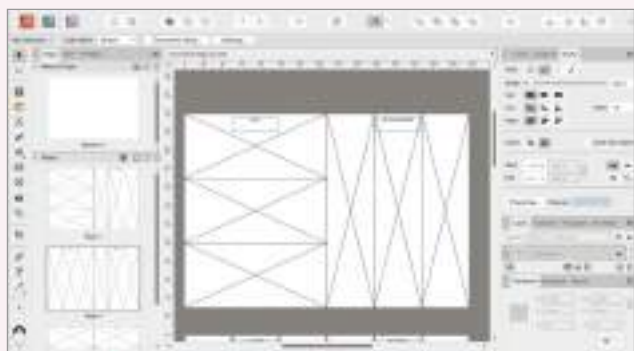
Q For years I used Adobe InDesign for work. During this period I also used it for personal use to create posters, invitations and documents. I've now retired and can't justify paying the annual subscription for InDesign. Do you know of another program, preferably free, that'll let me open and edit InDesign files?

Keith MacBain

A Our preferred option is Serif's Affinity Publisher 2 (pictured below). It costs £68 (one-off payment), but Serif offers a generous six-month free trial, alongside companion programs Designer and Photo (www.snipca.com/51798). Although Publisher can't directly open InDesign files, it can work with IDML (InDesign Markup Language), which is available as an export option in InDesign CS4 and later. If you still have access to InDesign, export the documents you need to work with in this format before your Creative Cloud subscription expires.

If you can no longer export to IDML format but you've exported your InDesign docs as PDFs, you may be able to make changes using a PDF-editing tool, though this will depend on how the PDFs were created. For example, elements on the page may have been flattened to save space, which can make them harder to edit, or you may no longer have access to the fonts you require. Try Adobe's free online PDF-editing tool as a starting point (www.snipca.com/51799).

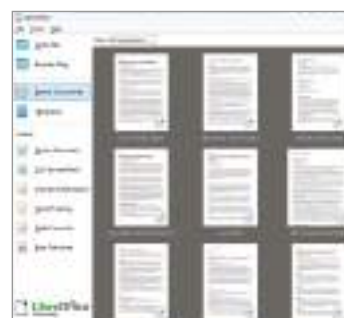
As a fallback, you could try exporting your PDFs to an alternative format, such as Microsoft Word, using PDFgear (free from www.pdfgear.com). It also has editing, annotating and signing tools.



How can I open Collabora files on my laptop?

Q Thanks for the excellent advice on how to use

Collabora (www.snipca.com/50542) to edit Word documents on tablets (Issue 687, page 20). As a result, I saved a Word file to OneDrive and was able to access it on my Android tablet. But can I access this edited file on my laptop?



Brian Barn

A Collabora is based on the excellent free office suite LibreOffice (www.libreoffice.org). As long as your laptop is logged into the same OneDrive account where you store Word documents, you should be able to open them from within LibreOffice's file manager (pictured). During setup it gives you the option to force Windows to automatically open any OpenDocument files within LibreOffice tools. Accept this option and double-clicking a document in OneDrive will open it in the relevant LibreOffice program.

What can I use to keep track of which jigsaws I've completed?

Q I've done so many jigsaw puzzles over the years it's difficult to remember them all. Is there a free app for my Android phone that can let me check which ones I've previously completed?



Mike Willcocks

A Yes, try Collabora Office Mobile (www.snipca.com/51800, pictured) or Google Sheets (which may be already installed on your phone) to create a spreadsheet with columns for manufacturer, puzzle title and number of pieces. Then, while browsing jigsaw puzzles in a shop, you can sort the data according to these columns to quickly check which ones you've previously completed. If you have nimble fingers and sharp eyes, you could also add a column containing barcodes.

Named & Shamed



Keumars Afifi-Sabet puts the boot into tech villains, jargon-spouting companies and software trying to trick you

SOFTWARE WARNING!

Marketing firm CMG claims to listen to your phone's mic

I don't think I'm especially paranoid, but personalised



adverts are turning me into a conspiracy theorist who feels watched no matter what I do online. Case in point: I need a new jacket and recently spent five minutes looking at one online. I decided against it and clicked away, only to be deluged with adverts for the jacket wherever I went online for days afterwards.

However, I'm still reluctant to believe that advertisers use your phone microphone to eavesdrop on your conversations. But many people suspect this is happening. And they would have felt vindicated by a report from investigative journalists at 404 Media claiming US marketing firm Cox Media Group (CMG) had admitted it does exactly that.

In August, 404 Media released a leaked presentation that CMG shows to potential clients. Titled 'Yes, Our Phones Are Listening to Us' (1 in our screenshot, www.snipca.com/52001), it boasts about how the company's Active Listening software uses AI to "capture real-time

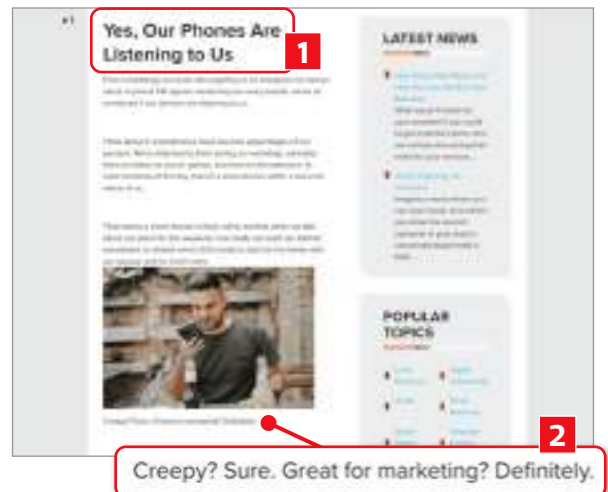
CMG brazenly admits that its phone-listening software is 'creepy'

intent data by listening to our conversations". 'Intent data' is marketing speak for a customer's desire to buy an item.

What's astonishing is how brazen CMG is about this. It admits how sinister it sounds, saying: 'Creepy? Sure. Great for marketing? Definitely' (2).

It even promoted its service last year with a blog post (now deleted) titled 'We know what you're thinking. Is this even legal?'.

This might not matter if CMG was some tiny firm that's never won a marketing contract. But it has worked with Amazon, Google, Microsoft and Meta (which owns Facebook, Instagram and WhatsApp) – though all four denied using the company's Active Listening software.



Yet CMG's sales pitch is so tempting that I can imagine many less reputable companies falling for it, so in our next issue we'll explain how to stop anyone using your phone to spy on you.

To paraphrase *Catch-22* author Joseph Heller, just because you're paranoid doesn't mean they're not listening to your conversations about which jacket to buy.

WHAT ARE THEY TALKING ABOUT?



WHAT THEY SAY

Microsoft's security team

www.snipca.com/51998

"Daily workflows should be enhanced with operational threat intelligence artifacts to determine an environmental baseline. Proactive hunt hypotheses should seek to test the understanding and actively seek to identify gaps in various aspects of the baseline, identifying any behavioural anomalies straying from 'normal operations' and developing high-fidelity, real-world detections..."

WHAT THEY MEAN

We're better at fighting threats than explaining them. Hopefully.

BARRY'S VILLAIN OF THE FORTNIGHT

Callum Picari

Handing over £30 a week to subscribe to software sounds pricey to me, but enough criminals were willing to pay it to make Callum Picari a wealthy man. He was the mastermind of a gang that offered tools that let scammers bypass security protection and access bank accounts.

He claimed fraudsters using the tools would get rich "within minutes", and even advertised an 'Elite' package for



£380 that could access Visa and Mastercard verification sites.

More than 12,500 people were targeted between September 2019 and March 2021 before police shut down the site.

Picari was arrested, along with accomplices Vijayasidhurshan Vijayanathan and Aza Siddeeqe, and they've all now pleaded guilty to conspiracy to make or supply articles for use in fraud. Sentencing will follow in November.



ALL-IN-ONE PC | £888 from Lenovo www.snipca.com/51906

Lenovo ThinkCentre M90a Gen 5

Purpose built

Most all-in-one PCs are manufactured in bulk, with few opportunities to tweak the specifications when ordering. The Lenovo ThinkCentre M90a Gen 5 bucks this trend, offering an off-the-shelf model for those who want it or the option to tweak its full range of components – from the processor to the stand that supports it – so you can effectively build the ideal all-in-one PC for your requirements.

“A customisable all-in-one PC best suited to office and web-based tasks”

The model Lenovo sent us for review isn't quite the standard model you get if you simply click the 'Add to basket' option on the main Lenovo M90a web page (www.snipca.com/51906). That base model costs £1,120. The version we're looking at here is a more affordable £888, and replaces the 14th-generation Intel Core i5-14500 processor for an older i5-13400 chip.

To recreate our £888 test model, you'll need to click the 'Build Your PC' link on the option with the i5-13400 processor, priced at £919.99 including VAT, then make sure you change your specifications to match those listed below right. Pay particular attention to the Wireless option because the base model doesn't include Wi-Fi. Also, in the System Stand option we opted for the Full Function stand and think it's worth paying a bit more for its range of adjustments, including rotating into portrait mode (pictured right).



You can, of course, upgrade any other elements you like with this very flexible system, but always keep an eye on the price at the top, which will change as you add and remove parts.

Its performance level compared well with several all-in-one PCs that we've tested recently. It was faster in our tests than the HP 27-cr0014na Full-HD All-in-One (£819 from www.snipca.com/49728, reviewed in Issue 681), but unsurprisingly couldn't match the significantly more expensive Acer Aspire S32-1856 (£1,499 from www.snipca.com/50768, reviewed in Issue 687).

The ThinkCentre relies on the graphics hardware of the main processor rather than a standalone card, making it best suited to office and web-based tasks, rather than 3D games.

The screen is also impressive. At 23.6in across the diagonal it's smaller than the 27in and 32in panels in the rival machines mentioned above, but offers the same 1920x1080-pixel resolution as the larger HP screen. This means it offers greater detail when you're sitting up close. Its peak brightness level of 290cd/m² is perfectly fine for indoor use, and it's reasonably accurate, recreating 104.7 per cent of the sRGB colour standard, and 74.1 per cent of DCI-P3.

The build quality is good. The

plastic case that houses everything is less than 55mm at its deepest, so it's no thicker than a regular 24in monitor. The bezels above and to the sides are stylishly slender at 8mm, while the fascia below is much wider at 48mm because it accommodates its two decent 3-Watt speakers.

There is also a wide range of connections including six USB 3.0, one USB-C port, one HDMI and a DisplayPort.

SPECIFICATIONS

Ten-core Intel Core i5-13400 processor • 24in 1920x1080-pixel 60Hz IPS screen • 16GB RAM • Intel UHD Graphics 730 • 512TB SSD • 2x 3W speakers • Wi-Fi 6 • Bluetooth 5.1 • 1080p webcam • 1x HDMI port • 1x DisplayPort • 1x USB-C port • 6x USB 3.0 ports • 1x Gigabit Ethernet port • 1x SD card reader • Windows 11 Pro • 217x540x94mm (HxWxD) • 8.05kg • One-year warranty www.snipca.com/51906

VERDICT A decent all-in-one PC that's ideal for Windows work and can be configured to suit your needs, though it won't run the latest games



ALTERNATIVE HP 27-cr0014na Full-HD All-in-One £799 A larger screen for less money, but its overall performance level isn't as high



MINI PC | £769 from Scan www.snipca.com/51925

MSI Cubi NUC1M

U got it

Mini PCs continue to flood the market and this Cubi model from Taiwanese manufacturer MSI is available in several versions from Scan at www.snipca.com/51924. These include barebones models without RAM and storage, in case you want to kit out your own with any spare components you may already have. However, here we're reviewing the top-of-the-range Core 7 150U model with 16GB of RAM and a 1TB SSD.

“It handles the basic jobs well, and can be bought from a reputable UK seller”

The Core 7 150U is a new Intel chip launched in January. Despite sounding like it should be in the same processor family as the Intel Core i7, it has fewer cores, making it slower to run advanced software and perform simultaneous Windows tasks. It's more comparable to an older i5 processor when it comes to raw performance.

Like all U series chips, the 150U is designed for maximum efficiency rather than all-out speed. When we pushed it to

SPECIFICATIONS

10-core Intel Core 7 150U processor • 16GB RAM • Intel Graphics • 1TB SSD • Wi-Fi 7 • Bluetooth 5.3 • 2x 2.5GB Ethernet ports • 1x USB-C port • 4x USB 3.0 ports • 2x HDMI ports • Windows 11 Pro • 50x136x133mm (HxWxD) • 630g • Three-year warranty www.snipca.com/51925



extremes, the Cubi's cooling fan kicked in at a low-pitched but audible hum.

In terms of basic performance, it holds its own against our current favourite mini PC, the Geekom A8 (£899 from www.snipca.com/51157, reviewed in Issue 689), in single-core benchmark tests. That means it copes admirably with simple Windows tasks such as office work, as well as email handling and web browsing.

However, it lagged well behind when we challenged it with jobs that push the processor to its limits. In multi-core tests the A8 ran more than 50-per-cent faster, so it's significantly better at running demanding programs such as photo- and video-editing software.

In gaming tests the A8 was nearly twice as fast. At 1080p resolution with high detail settings, the Cubi ran our test game at 22 frames per second (fps), whereas the A8 managed 35fps. At around £130 more, then, the A8 is a much better all-rounder for those who want a machine that can handle games smoothly.

For less demanding users, however, there's still plenty to like about the Cubi. It has two USB-C ports, both supporting Thunderbolt 4. These are backed up by four USB 3.0, two HDMI and two Ethernet ports, as well as a microSD card slot (all pictured above and below). It also has the latest Wi-Fi 7

standard and Bluetooth 5.3.

Finally, while many mini PCs are available only through import from abroad, you can buy the Cubi from UK retailer Scan. This should make it easier and quicker to deal with any problems.

HOW WE TEST

Computeractive is owned by Future PLC, which employs a team of specialist technical reviewers. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every phone and tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Future PLC also owns the magazines *Maximum PC*, *PC Pro* and *T3*, and the websites *Laptop Mag* (www.laptopmag.com), *TechRadar* (www.techradar.com) and *Windows Central* (www.windowscentral.com). This means we can test thousands of products before choosing the most relevant for *Computeractive*.

FAIR AND IMPARTIAL

Our writers follow strict guidelines to ensure the reviews are fair and impartial. The manufacturer has no involvement in our tests.

OUR AWARDS



We award every product that gets five stars our Buy It! stamp of approval. It means we were

extremely impressed by the product, and we think you will be too.



Every product that gets a four-star review is given the Recommended award. We highly recommend these products, although they just fail to meet the high standard of our Buy It! winners.

PRICES

Our reviews contain a link to the best price we found online at the time of press.

VERDICT A decent mini PC from a renowned brand, but a lacklustre choice of processor leaves it trailing behind its rivals in performance



ALTERNATIVE

Geekom A8 £854 A more powerful AMD processor makes this a superior all-round performer and better value



LAPTOP | £750 from PCSpecialist www.snipca.com/51946

PCSpecialist 14 Lafité AI AMD

Don't push it

UK-based PC builder PCSpecialist is best known for its desktop PCs, but it also makes laptops. The 14 Lafité AI AMD is one of its latest examples and, as with most machines from the company, you can customise the components to create the precise build you want.

The basic specification includes the case, screen and AMD Ryzen 7 8845HS processor, and you can't change those elements. The most affordable model throws in 8GB of **RAM** and a 256GB **SSD**, and costs £693. This is the laptop you'll buy if you visit our link above and click the green Proceed button at the top right.

“A basic laptop that offers upgrade choices and a stunning screen, but knows its limits”

We wanted to test a slightly better specification, however, so we upgraded our 8GB memory stick to a single 16GB unit, and our SSD to a 512GB Solidigm P41+ drive, which is faster than the basic drive. This bumped the price to £750, which we considered money well spent for the likely performance improvement. You can upgrade these components when ordering by choosing the relevant options in the 'Memory (RAM)' and '1st M.2 SSD Drive' dropdown menus.

It has an **NPU** to help it run **AI** tasks, as indicated in its name, but it doesn't make the grade as one of Microsoft's Copilot+

SPECIFICATIONS

Eight-core AMD Ryzen 7 8845HS NPU processor, 16 TOPS • 16GB RAM • 14in 120Hz 2880x1800-pixel resolution IPS screen • 512GB SSD • Wi-Fi 6E • Bluetooth 5.2 • 2x USB-C ports • 3x USB 3.0 ports • 1x HDMI port • 1x Ethernet port • Windows 11 Home • 18.5x313x220mm (HxWxD) • 1.4kg • Three-year warranty www.snipca.com/51946



PCs because it's only capable of 16 TOPS (trillions of instructions per second), far below the 40 TOPS Microsoft sets as a minimum.

In **benchmark** tests involving jobs that use just a single **core**, it performed six-per-cent faster than our current favourite laptop, the Dell Inspiron 14 Plus (£699 from www.snipca.com/51831, reviewed in Issue 683). This suggests that the Lafité's strengths lie in handling office documents, browsing the web and checking email.

The Inspiron's Intel Core Ultra 7 155H chip outclassed it in multi-core tests – unsurprising, given it has twice the number of cores (16). Even though 10 of these are **efficiency cores** that simply support the main cores, they clearly do their job well because the Inspiron performed 30-per-cent faster in more resource-hungry challenges, such as editing photos and videos.

Similar differences were evident when we compared their respective graphic capabilities. Both use the hardware that's built into their processors, rather than outsourcing the work to a standalone **graphics card**, but the Inspiron overcame this limitation much better.

In gaming benchmarks the Inspiron was twice as fast. When playing actual games, the Lafité could only match the Inspiron's 30fps at 1080p resolution on low detail settings. In a nutshell, while the Lafité handles basic tasks well, it simply isn't cut out for image and video editing or playing the latest games.

One area where it beats the Inspiron

hands down, however, is in the quality of its 14in screen. Not only does this **IPS** panel produce dazzling whites, but it also covers a near-perfect 99 per cent of the **sRGB** colour standard, and offers a peak brightness level of 375cd/m². Add a 120Hz **refresh rate** and pin-sharp 2880x1800-pixel resolution and it's a crystal-clear winner. Battery life is also pretty good, coming in at just over 12 hours in our light-usage test.

We were less impressed by the keyboard, which lacks the tactile springy response we prefer, but it has a handy backlight that'll help you type in darker conditions and its layout has everything where you'd expect it to be. The touchpad is similarly straightforward, but we found the buttons a little too clicky for our liking.

It's well equipped with ports, with the left and right edges sharing three **USB 3.0** ports and a **USB-C** port. The rear of the laptop (pictured below left) houses another USB-C, one **HDMI** and one Ethernet port.

VERDICT A reasonably priced laptop with a high-quality screen that handles general Windows jobs well, but it can't match more powerful rivals when it comes to resource-hungry tasks

★★★★★

ALTERNATIVE

Dell Inspiron 14 Plus £699 Its screen isn't as good, but its Intel Ultra 7 processor makes it significantly more powerful



MONITOR | £529 from Samsung www.snipca.com/51993

Samsung Smart Monitor M8

At the double

If you live in a smaller property you may not have the luxury of having your main PC and TV in separate rooms. Or perhaps your home office doubles as your private TV room, away from the rest of the household. If so, the Samsung Smart Monitor M8 may just be for you.

It's designed to work as a monitor and a TV, offering the sort of screen quality that makes it great for work during the day and for watching TV and films once you've knocked off. It's expensive compared with most other monitors and TV sets of this size, but if it saves you having to buy two separate pieces of kit then it may just be worth it.

“The screen is good enough both for watching TV and using Windows”

The M8 has a 31.5in screen with a **4K** (3840x2160-pixel) resolution. It has the level of quality we've come to expect from Samsung. Its **VA** technology lacks the perfect contrast and dazzling whites you might get from an **OLED** screen, but both are still more than good enough. Maximum brightness is an impressive 461cd/m², while it reproduces 84 per cent of the **DCI-P3** colour standard.

This makes films and TV shows look great, and provides eye-catching white backgrounds when working in Windows. To complement the images, its two hefty five-watt speakers pump out reasonable sound.

You have a choice of inputs, with one **HDMI**, one **USB-C** and two **USB 2.0** ports. The USB-C port can charge a connected laptop at up to 65W, which should be fine

SPECIFICATIONS

31.5in VA LCD screen • 3840x2160-pixel resolution • 60Hz refresh rate • 4ms response time • 2x 5W speakers • 1x HDMI port • 1x USB-C port • 2x USB 2.0 ports • 496x713x200mm (HxWxD) • 7.2kg • One-year warranty www.snipca.com/51993



for most models. There's also a **1440p** webcam supplied, which attaches magnetically to the top of the screen, so you can easily remove it if you don't use it often.

Although it can pivot into portrait mode, it isn't the most flexible stand we've seen. It tilts forward and backwards slightly, and while you get 120mm height adjustment, there's no swivel option.

Click the Home button on the supplied remote control and you'll drop into the Tizen OS interface, which is constantly running in the background. This will be familiar to anyone who's used a Samsung TV in recent years, providing access to all the usual streaming and catch-up services via its TV Plus platform.

The 'Smart' element of its name refers to the fact that you can use it as a central hub to control any smart-home devices you might have (lights, thermostats and so on). You can also control it by voice using Google Assistant or Amazon's Alexa.

Gamers should steer clear, however, because its 60Hz **refresh rate** is just not good enough for a smooth experience.

VERDICT A useful two-in-one device that works well as a traditional PC monitor and for streaming TV

★★★★★

ALTERNATIVE

LG 24TQ510S-PZ £140 A smaller 23in model, which is cheaper and comes with an aerial socket for watching terrestrial TV channels



CHOOSE THE RIGHT SPECS

NPU



What is it?

An NPU (neural processing unit) is a specialist **core** on a multi-core processor. It's used to do the simple but high-volume calculations needed to run software with **AI** tools.

How does it work?

Whenever a compatible program starts performing a task that requires AI input, it sends the work to the NPU. This prevents the processor's other cores becoming bogged down with lots of small tasks, which could significantly slow the performance of PC.

What are the specs?

The speed of an NPU is measured in TOPS (trillions of operations per second). For example, the AMD Ryzen 7 8845HS processor in the PC Specialist 14 Lafite AI AMD laptop reviewed on page 24 has an NPU capable of 16 TOPS. Microsoft offers a special version of Windows for its Copilot+ laptops, which have extra AI tools built in. A laptop's processor needs an NPU that's capable of 40 TOPS to qualify for Copilot+ status. The Asus Vivobook S 15 Copilot+ PC (£999 from www.snipca.com/51051, tested Issue 688, pictured), for example, has a Qualcomm Snapdragon X Elite processor that hits 45 TOPS.



Can I change it later?

Only by changing the processor in your PC. This is rarely possible with laptops, but can be done with desktop PCs. However, it's one of the more complicated jobs because you'll need to ensure your replacement processor is compatible with your motherboard, and remove any cooling and other components that might be obstructing access to it.

ROUTER | £300 from Amazon www.snipca.com/51974

Netgear Nighthawk RS300

Magnificent seven

Wi-Fi 7 has been slow to catch on, but as more and more new PCs start hitting the market with it built in (such as the MSI Cubi NUC 1M, reviewed on page 23), it might be about to take off properly.

If so, then the Nighthawk RS300 has arrived at just the right time. It's the first Wi-Fi 7 router we've taken a look at because it's the first we've seen with a sensible price tag. It's considerably cheaper than previous releases such as Amazon's Eero Max 7 (£500 from www.snipca.com/51976) and Netgear's own Nighthawk RS700S (£649 from www.snipca.com/51975).

Despite its relatively low price tag, the RS300 offers surprisingly good specifications – Netgear claims its 6GHz band can unleash nippy maximum speeds of 5.9Gbps. It also claims the router can cover areas of up to 185 square metres and support up to 100 devices, which should be more than enough for most home users. For wired connections the unit contains five Ethernet ports (one being reserved for the inward connection, pictured right) and one USB port.

Setup involves Netgear's

usual method of installing a mobile app and scanning a QR code, to identify and connect to the router. The rest of the process is largely automatic. More advanced management features, such as port forwarding, can be configured in the router's web interface.

To test it, we connected it to a NAS drive via a 2.5Gbps Ethernet port, then moved our Wi-Fi 7-capable laptop to various rooms. We then measured average download speeds for a series of 100MB data files.

The RS300 hit very impressive speeds of up to 140MB/s with close-range downloads. We haven't seen any router, at any price, go faster than this.

As with any standalone router, performance drops off the further you move from it, but the RS300 still held up well. Even in the most distant room in our house we managed an average download rate of 13MB/s, which is more than four times the

SPECIFICATIONS

Tri-band: 2.4GHz/5GHz/6GHz • Wi-Fi 7 • 3x 2.5Gigabit Ethernet ports • 2x Gigabit Ethernet ports • 249x150x102mm (HxWxD) • 950g • Two-year warranty www.snipca.com/51974



recommended minimum for streaming 4K HDR video. Assuming you don't live in a stately home, this router's reach and performance level should definitely satisfy your household's needs.

VERDICT With its expansive coverage and fast speeds, this is the first Wi-Fi 7 router we've seen at a reasonable price

★★★★★

ALTERNATIVE Asus RT-AXE7800

£200 If you don't need Wi-Fi 7 yet, you can save £100 with this Wi-Fi 6E alternative



WHAT SHOULD I BUY?

We solve your buying dilemmas

Can you suggest a robust external disc drive?

Q I'm having a hard time choosing an external disc drive from Amazon. I've tried several models, but they just keep breaking on me and seem very fragile. Can you recommend a better-quality external disc drive that is made to last? I'm not too bothered about the price.

John Cranny

A There are two options here. If you don't want to spend too much and just want a drive

from a brand with a reputation for quality, you should consider the Asus Slim DVD Writer (£29 from www.snipca.com/51978). This is an excellent drive and has very favourable reviews on Argos's website. But if you find slim portable CD/DVD drives awkward to handle, it may be wise to look elsewhere.

For a more robust unit we'd suggest an external Blu-ray writer. Admittedly, this is probably more than you need for the types of discs you want to read and write to, but they'll do exactly what you need.

And crucially, they come in larger, sturdier cases, and have drawers you can gently place a disc into, rather than one you have to click into place.

Our recommendation would be the Pioneer External Blu-ray Drive BDR-X13EBK (£160 from www.snipca.com/51979, pictured). While it's significantly more expensive, this is a robust unit that's far less likely to suffer damage when being used.

 Do you need advice on what you should buy? Email us at letters@computeractive.co.uk



Meticulous design and performance



Vand water-cooled PC

Industry-leading water cooled PC, redefining your gaming experience, delivering a harmonious blend of timeless aesthetic and unparalleled performance.

chillblast.com

Chillblast
GAME. CREATE. WIN

WEBCAM | £21 from Laptops Direct www.snipca.com/51955

HP 325 FHD

Cam do better

The HP 325 FHD sits at the cheapest end of HP's webcam range. It's intended to provide basic video functionality to desktop PCs, but may also appeal to anyone who owns a laptop with a poor-quality or broken webcam.

It has a pleasing rounded design, a permanently connected USB cable and a clip that will attach to any laptop or monitor of your choice. It also comes with a tripod connection if you'd like to use it for streaming an event, like a family birthday party. A privacy shutter can be mounted on to the front to ensure you're not being watched when you're not using it.

SPECIFICATIONS

1080p at 30fps • 66-degree field of view • 1x microphone • 150cm USB cable • 53x72x54mm (HxWxD) • 107g • One-year warranty www.snipca.com/51955

The 1080p image quality is pretty good as long as you make sure your face is well lit. In natural daylight that is evenly spread across your face, the webcam performs absolutely fine. Quality drops in lower light, however, so if you tend to video-chat in dark corners of the house, your call-recipient may be disappointed with the shadowy images they receive.

It does offer a wide 66-degree viewing angle, though, which means you can get multiple people into the frame for a family chat.

Another compromise is that there's only one microphone, where pricier cameras typically use more to better capture your voice. We found the sound came through slightly distorted in our tests, which makes it pretty much unusable for audio. Instead, you'll want a separate mic that delivers better results.



VERDICT A budget webcam, but its cost-cutting compromises come at a price – namely poor images in low light and disappointing audio quality

★★★★★

ALTERNATIVE

Logitech Brio 105 £45 More than twice the price but with significantly better sound and image quality, particularly in low light



SOUNDBAR | £140 from Amazon www.snipca.com/51962

Ultimea Poseidon D50

It's behind you

As you'll have seen from our recent reviews, there's a wide range of reasonably priced TVs around with surprisingly high picture quality. However, this prioritisation of screen often means audio quality is an afterthought. Even more expensive sets can't recreate the immersive sound experience you might find in a cinema.

The Ultimea Poseidon D50 is an affordable speaker system that can bring a much-needed sound boost to practically any TV. The soundbar

SPECIFICATIONS

5.1 speaker channels • 5x 2.25in speaker drivers (soundbar and satellites); 1x 5.25in speaker driver (subwoofer) • 1x HDMI port • 1x optical port • 1x auxiliary port • 1x USB port • Bluetooth 5.3 • 70x400x90mm (soundbar) • 1.36kg (soundbar) • One-year warranty www.snipca.com/51962

component sits below your TV and produces a front-facing sound. There's also a subwoofer to add rumbling bass, and two smaller speakers designed to sit behind you and to each side.

Setup is simple: the soundbar connects to your TV via an HDMI cable. The woofer and speakers connect to the soundbar wirelessly, though they need to be connected to each other with cables and plugged into a wall socket for power. This means you don't need to run a cable around the room, and can probably hide most of it behind your sofa.

At this price you don't get Dolby Atmos or DTS:X compatibility. However, when watching action movies we were impressed with the three-dimensional waves of gunshots and explosions. When watching football the whistles of the



crowd blared out from the side speakers while a thumping drum beat out from the subwoofer, making the whole experience incredibly immersive.

VERDICT An affordable way into surround sound, but it doesn't work with the latest audio technologies

★★★★★

ALTERNATIVE

Ultimea Nova S50 £110 This alternative drops the small speakers but adds compatibility with Dolby Atmos and costs slightly less



DIGITAL RADIO | £299 from John Lewis www.snipca.com/52002

Ruark Audio R1S Smart Radio

Sound's amazing

British company Ruark Audio has been producing great-sounding small radios for more than 20 years, but this is the first time it's added a Wi-Fi connection into the usual mix of DAB, FM and Bluetooth. This adds the ability to stream radio and music straight from the internet without needing to route it through a phone or tablet. It maintains key elements from previous models, though, including a smart design, intuitive controls and stunning sound.

“It has a smart design, intuitive controls and stunning sound”

It's small enough to comfortably perch on a kitchen worktop, a desktop or bedside table. The front panel has a sleek wooden fascia that conceals the speaker and looks classy in any room. The full-colour screen is sharp, with strong contrast that makes text and graphics visible from a distance. The interface doesn't try to cram in too much information, but has enough space to accommodate station presets and sub-menus.

On the top of the case is the company's customary RotoDial controller (pictured below), which is responsive and makes it easy to adjust the volume, select music sources, recall saved presets (eight per radio source), manage playback and scan radio stations. It also provides access to other menu options, including those for changing display brightness, setting alarms and timers, searching for specific stations and more.

With FM, DAB/DAB+ and internet radio available there's an almost limitless selection of audio you can tune into. If that's still not enough there are integrated apps for streaming Spotify,



Amazon Music and Deezer. Missing from this list is Tidal and Apple Music, but if you want to play audio from elsewhere it's easy to connect via Bluetooth.

Around the back there's a handy USB-C port through which you can charge your mobile device or play MP3 files. There's also a 3.5mm headphone jack for wired headphones and a space to connect an optional battery pack (£69) if you want to take it beyond the reach of a wall socket.

The sound quality is surprisingly clear and crisp, with plenty of pleasing detail. We wouldn't expect wall-shaking bass from a unit this small, but there's enough here to make an impact. In short, this is one of the best-sounding internet radios of this size that we've ever heard.

SPECIFICATIONS

FM, DAB/DAB+ and internet radio • Supports Spotify, Amazon and Deezer • Bluetooth 5.2 • 3.5mm headphone jack • USB-C port • 175x130x135mm (HxWxD) • 1.6kg • Two-year warranty www.snipca.com/52002

VERDICT A compact, classy digital radio that sounds great, is easy to use and offers a wide range of source options, making it one of the best internet radios we've tested

★★★★★

ALTERNATIVE Revo SuperConnect Stereo £399 More expensive, but it has stereo speakers and creates a bigger sound



DO I REALLY NEED...

A laptop with a screen that follows you?

What is it?

The Lenovo Auto Twist AI PC (pictured) is a laptop with a motorised hinge that rotates the screen.

What does it do?

The laptop uses AI to track your movements and adjust the screen's angle to ensure you can see it wherever you are. It reacts to voice commands, such as 'close laptop' to shut the screen/lid or 'tablet mode' to hide the keyboard under the screen. It will also close automatically when you walk away from it.



What's the catch?

At the moment the Auto Twist is at the 'proof of concept' stage, meaning there's no guarantee it will ever be made, let alone sold to the public.

So can I do without it?

Yes, although it might be very useful for people who have limited use of their arms.

NEXT ISSUE

On Sale Weds 9 Oct

GMKtec NucBox M6

A very affordable mini PC – but is there a catch?



HP Omnibook X14 Copilot+ laptop is slim, lightweight and keeps going for hours

These and much more...

Subscribe to Computeractive at www.getcomputeractive.co.uk



Our pick of products that have won the **Buy It** award

LAPTOP

Dell Inspiron 14 Plus
£699 from www.snipca.com/51831
Tested Issue 683



This laptop has the same processor (Intel Core Ultra 7 155H) as our previous favourite (Acer Swift Go 4), but manages to squeeze more speed out of it. It also comes with 16GB RAM, 512GB SSD and a 14in 2240x1400-pixel screen. Excellent value overall.

ALTERNATIVE Acer Swift Go 14 Still a fast and powerful laptop, with a great 14in screen. £1099 from www.snipca.com/49733

DESKTOP PC

Palicomp AMD Cobra
£400 from www.snipca.com/43515
Tested Issue 643



This fast PC is a mouth-watering bargain, with 16GB of RAM, a 2TB SSD and a six-core processor – though it lacks USB-C ports and built-in Wi-Fi.

ALTERNATIVE Wired2Fire Ultima WS Home Office Workstation Blisteringly fast PC, powered by an overclocked eight-core processor and 1TB SSD. £656 from www.snipca.com/41500

APPLE IPAD

Apple iPad 10.9in
£324 from www.snipca.com/51839
Tested Issue 646



The price of the 10th-generation iPad, released in 2022, has fallen far enough to make it better value than earlier models. If the Amazon price above has expired, get it for £349 on Apple's site.

ALTERNATIVE iPad Mini With an even better, but smaller, screen than the 10.9in iPad, the Mini also supports the Pencil and has 64GB of storage. £499 from www.snipca.com/33050

ANDROID TABLET

Samsung Galaxy Tab S9
£799 from www.snipca.com/50039
Tested Issue 667



With a much brighter screen than our previous favourite – the Galaxy Tab S8 – this is perfect for watching TV. It also has a faster processor, so tasks feel smoother, even with several windows open. £799 will get you the 128GB version. If you want 256GB you'll need to spend around £100 more.

ALTERNATIVE Lenovo Tab P11 Pro It's slower than the Tab S9 and the screen is duller, but has a detachable keyboard so you can use it as a laptop. £400 from www.snipca.com/45244

APPLE IPHONE

Apple iPhone 13
£499 from www.snipca.com/52048
Tested Issue 627



Now £300 cheaper than its 2021 launch price, the iPhone 13 has a superb screen, long battery life and an excellent camera – particularly for taking quick snaps without blurring. But it might be soon be replaced as our top choice by the new iPhone 16s.

ALTERNATIVE iPhone SE With a single camera and smaller screen but the same powerful A15 processor and 64GB storage as the iPhone 14, it's great value. £429 from www.snipca.com/34773

ANDROID PHONE

Google Pixel 7a
£370 from www.snipca.com/46332
Tested Issue 660

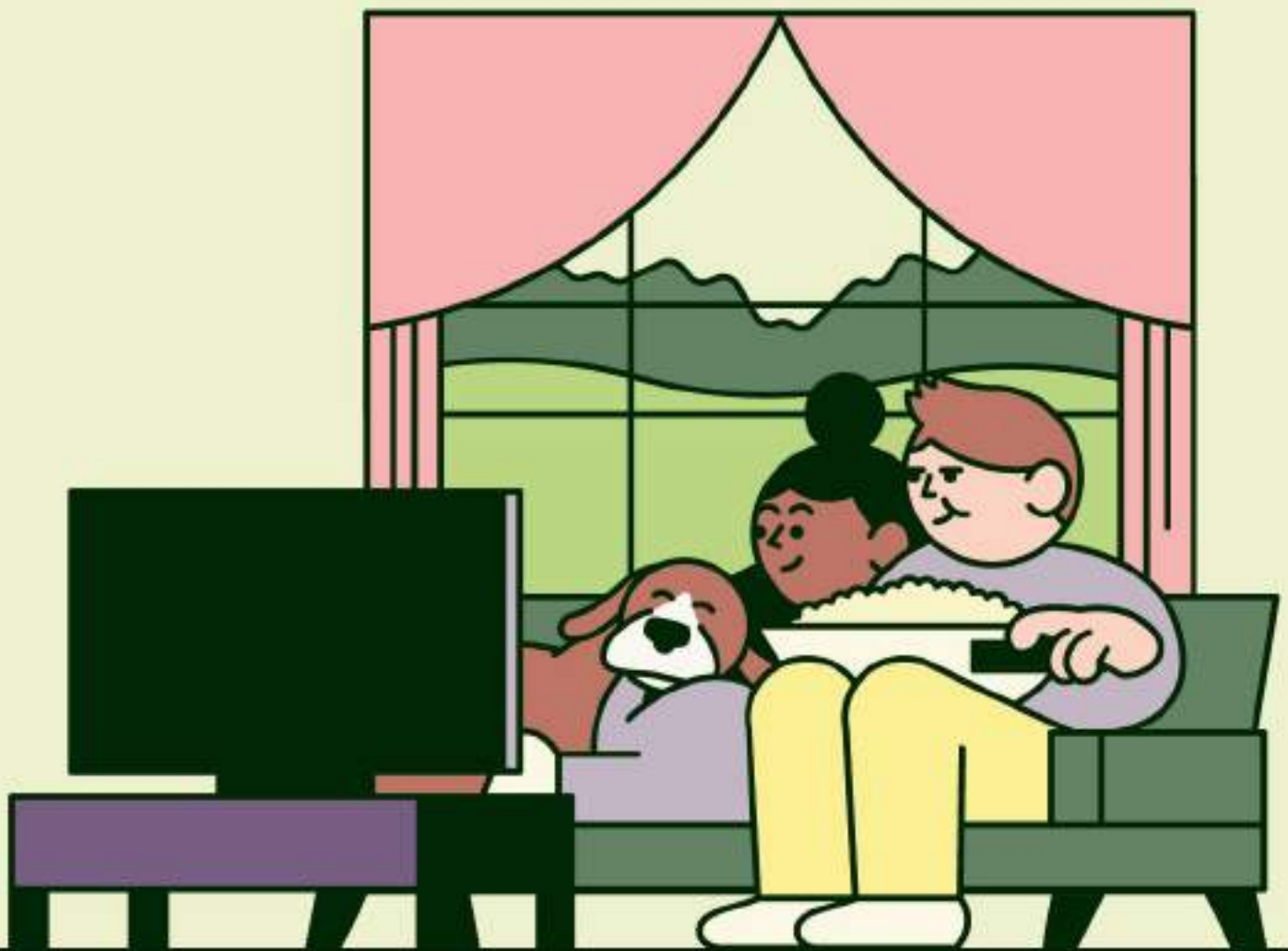


A cheaper version of Google's flagship phone, this uses AI to add clarity to photos, and lasts an impressive 10 hours. Has a fast processor and 8GB RAM to supercharge performance.

ALTERNATIVE Nothing Phone 2a Don't be put off by the odd name. This has a distinctive design, superb camera and decent battery life. From a UK company too. £329 from www.snipca.com/49930

SAVVY SAVERS, STEP THIS WAY.

Discover cover options for car, home and travel insurance, plus broadband and more.



GO.
COMPARE

Get more information and compare quotes at [Go.Compare](https://www.Go.Compare).

Buy It

Our pick of products that have won the **Buy It** award

MINI PC

NEW ENTRY

Geekom A8

£854 from www.snipca.com/51157

Tested Issue 689



This tiny machine (37x112x112mm) doesn't have much room for ports, but makes up for it with a 2TB SSD, a fast processor, and an SD slot for adding storage. It comes with 32GB RAM, as does a slightly slower model that's around £170 cheaper and has only a 1TB SSD. Take your pick.

ALTERNATIVE Beelink SER8 A decent model, with 1TB SSD and 32GB RAM, but it's bigger than average. £849 from www.snipca.com/51331

EBOOK READER

Kobo Libra Colour

£199 from www.snipca.com/50192

Tested Issue 683



Kobo's first colour e-reader, with an E-Ink Kaleido 3 screen that supports 4,096 tones, making illustrations and photos leap out at you. You can also make notes using a stylus, though that costs £70 extra. It has 32GB storage and Bluetooth for playing audiobooks.

ALTERNATIVE Amazon Kindle This low-cost option is a good choice, especially now it has 16GB of storage. £85 from www.snipca.com/52049

SECURITY SOFTWARE

Norton 360 Premium

£19.99 from www.snipca.com/33247

Tested Issue 629



Norton has always performed strongly in our antivirus tests, regularly making the top three. Owned by US firm NortonLifeLock, it's available at a discount on our Software Store. Use the link above for a 10-device, two-year licence. Other versions are available, including Norton 360 for Gamers.

ALTERNATIVE Bitdefender Total Security Another top performer that we're offering at a discount. £29.99 from www.snipca.com/41141

WEBCAM

Logitech C925e Business Webcam

£58 from www.snipca.com/50751

Tested Issue 608



Despite the name, this webcam is also great for home users. Its standout feature is automatically adjusting itself to keep your picture looking sharp. It offers a 78-degree field of view, which is fine for everyday video chats with one person in front of the camera.

ALTERNATIVE Creative Live Cam Sync 4K Affordable 4K webcam with high-quality video that can also capture voice from a distance. £38 from www.snipca.com/51577

PC MONITOR

BenQ BL2790QT

£230 from www.snipca.com/52050

Tested Issue 685



With a 1440p resolution on a 27in screen, this has a pixel density of 109 pixels per inch, making it extremely sharp. Also has great speakers, lots of controls and plenty of ports. It's the best balance between size, resolution, quality and price.

ALTERNATIVE Asus ROG Strix XG27ACS Another excellent 27in monitor with 1440p resolution and a fast refresh rate aimed at gamers. £260 from www.snipca.com/49898

SOLID-STATE DRIVE

Corsair MP600 Pro LPX 500GB

£66 from www.snipca.com/41547

Tested Issue 630



In our tests, this M.2 SSD hit speeds of 7,364MB/s and 6,870MB/s when reading and writing data – astonishingly fast scores. It's compatible with the new PCIe 4.0 standard, which is twice as fast as PCIe 3.0. The 1TB model costs £88; 2TB costs £158.

ALTERNATIVE Crucial MX500 500GB As fast as an SSD can get in the traditional 2.5in SATA format, this is a great-value upgrade. £44 from www.snipca.com/37304

COMPETITION

Win 1 of 4... **Ugreen Revodok Pro 313 docking stations**

Winner of a Recommended award in Issue 690 (page 26), Ugreen's Revodok Pro 313 13-in-1 Triple Display Docking Station is built to provide all your connectivity needs.

It has two HDMI ports, one DisplayPort, a 100W USB-C PD port, a 10Gbps USB-C data port, two 10Gbps USB-A data ports, two 5Gbps USB-A data ports, one 1000Mbps Ethernet socket, SD/TF card slots and 3.5mm audio.

It can hook up to three monitors to both HDMI ports and DisplayPort in 4K@60Hz max, making cross-screen multitasking and creative workflows even more efficient. You can transfer

UGREEN

files, movies and photos at speeds of up to 10Gbps via the USB-C data port and dual USB-A ports.

It's made from aluminium, with plastic caps at either end. The metallic grey finish looks classy, and doesn't attract smudges or scratches.

It's compatible with almost all makes of USB-C laptop, such as XPS, ThinkPad X1, ZenBook, Chromebook, Surface and many more.

To enter this competition, answer the question at www.snipca.com/51928



and submit your details by midnight Tuesday 8 October. Good luck!

You can buy the Revodok Pro 313 for £129.99 from www.snipca.com/51419. For more Ugreen products, including chargers, power banks, Bluetooth adapters and laptop stands, visit <https://uk.ugreen.com>.

PRINTER

Epson EcoTank ET-2830

£180 from www.snipca.com/51715

Tested Issue 676



This replaces the ET-1810 as our favourite printer because it adds copying and scanning to its functions for only £20 more. Print quality is great, especially for photos, which have crisp details, vivid colours and realistic skin tones.

ALTERNATIVE Epson EcoTank ET-1810

Not the fastest printer, but comes with enough ink for 4,500 mono and 7,500 colour pages. £160 from www.snipca.com/49863

SMART TV

Samsung Q60B

£490 from www.snipca.com/51020

Tested Issue 652



With our former favourite – the TCL 55RP620K – out of stock, Samsung's 43in set is our new pick. It has excellent colour reproduction in well-lit scenes, and the picture is wonderfully sharp, especially in 4K.

ALTERNATIVE LG OLED42C3

LG's 42in TV is more than double the price, but unlike TCL's model it has an OLED screen, boosting picture quality considerably. £859 from www.snipca.com/47271

ROUTER

Asus RT-AXE7800

£225 from www.snipca.com/47586

Tested Issue 665



This router has Wi-Fi 6E, so will be capable of the fastest possible speeds on the 6GHz network over the next few years. It has five Ethernet ports and also a USB 3.0 port to connect a hard drive or NAS drive.

ALTERNATIVE Synology WRX560

Our previous favourite remains an excellent choice, delivering speeds of up to 791.5Mbps. Add more units to set up mesh Wi-Fi. £212 from www.snipca.com/52051

Computeractive 2023

Back Issue CD & USB Stick

Both the CD and Stick contain all 26 issues from 2023

ON SALE NOW!



Buy the CD from us at
www.snipca.com/48860

Buy the Stick from us at
www.snipca.com/48861

Workshops & Tips

14 pages of easy-to-follow workshops and expert tips

35 Set up a music system in your car

38 Use Arc's 'spaces' to improve your browsing

40 Readers' Tips

42 Browser Tips: Chat with Google Gemini in a side panel

PLUS

44 Phone & Tablet Tips

46 Make Windows Better

47 Make Office Better

48 In the Club: Create an event in Communities

HOW TO...

Set up a music system in your car

by Nik Rawlinson

What you need: MP3 player; Disc drive **Time required:** Two hours

Streaming music is hugely popular these days, but many people still prefer the superior audio quality offered by MP3s. If you don't want to store MP3s on your phone, there are plenty of affordable players you can consider instead. One of the best is the MP3 Music Player (pictured) from UK firm Majority, which we gave a Recommended award to in Issue 686 (page 28).

It has 16GB of memory – enough to store thousands of tracks – and it costs £32 on Amazon (www.snipca.com/51791).

We think it's the ideal device to use for an in-car music system. You could leave it in your vehicle permanently so you can access your entire music collection wherever you happen to be. Just be sure to put it somewhere out of sight when you leave the car.

Here, we'll show you how to rip music from your CDs in a way that optimises the player's capacity, how to charge it in your vehicle, and how you can play the tracks it contains through your car stereo.

While we will refer directly to Majority's



music player, the principles we outline will also apply to similar products from other manufacturers.

1 Rip your music

You'll want to fit as much music as possible on to the player so you don't need to keep bringing it into your home to refresh the library. When converting your music, it therefore makes sense to pay attention to your settings, as they can help make the difference when it comes to making the most of the player's 16GB of memory.

When ripping your CDs you need to choose both the output format and the **bitrate** – measured in kilobits per second (Kbps) – which is the number of times per second that the ripping process samples the music it's extracting

from your CD. The more frequently it does this, the smoother the resulting audio output, and the larger the file size. Reducing the bitrate will probably reduce the quality of the ripped file, but helps you fit more into the player.

Whether you can hear the difference this makes depends on several factors.

Bitrate	AAC	MP3	FLAC	WMA
96Kbps	2.8MB	-	-	-
128Kbps	3.71MB	3.67MB	-	3.7MB
256Kbps	7.24MB	7.30MB	-	-
320Kbps	-	9.11MB	-	-
Lossless	-	-	26.6MB	-

One is how good your hearing is, but more relevant in this instance is the quality of your car speakers and the way you'll be connecting the player to your vehicle.

If you have low-quality speakers you may be able to get away with choosing a lower bitrate. However, if you're going to listen on high-quality speakers, and you can connect to your car radio through an auxiliary input socket or directly via Bluetooth, you probably want to choose a fairly high bitrate.

To see what difference the selection of bitrate and format made to file size (see table left), we used Windows Media Player to

convert a three-minute, 57-second song (*Thank You* by Portuguese singer Ana Moura, www.snipca.com/51922) using a range of different formats: AAC, MP3, FLAC and WMA. In each instance, we wrote down the size of the resulting file.

As you'll see from our table on page 35, the lower the bitrate (and therefore lower audio quality), the smaller the file size. Some combinations aren't possible. We couldn't convert WMA at higher than 196Kbps, which is why we only have a figure for 128Kbps. Further, although Windows Media Player let us select 320Kbps when we chose AAC as the format, Windows consistently reported that the track written to disk was a 256Kbps bitrate file, which is why we have no 320Kbps figure for that format.

For completeness, we also ripped the track in the lossless FLAC format which, in theory, should result in the highest-quality file, but more quickly consumes the available capacity of the device. The ripped file was 26.6MB, which is significantly larger than any of the other files appearing in that table. And, at the opposite end of the scale, we ripped the file in AAC format at 96Kbps, resulting in a file of just 2.8MB.

Here's how these figures translate to real-world situations. The table below shows the duration of music that could be stored on a 16GB device without increasing its storage if we assume every song is the same length and complexity as our test track.

While opting for a 256Kbps bitrate rather than 128Kbps means you can store a little more than half as much music on the device, you'll still be driving around with more than 2,000 four-minute tracks, on average, as you can see in the table above right.

We've calculated how many times our sample track could be stored at each of the selected settings on a 16GB device. If you assume an album has 12 tracks, the numbers in brackets represent how many albums you could take with you on your travels at each setting.

Do you own 180 albums? If not, you

How I play audio in my car

I rarely listen to anything when driving. However, when I do, it's usually podcasts rather than music. I find that my phone is the most convenient device to use in this instance as its Wi-Fi and cell connections allow it to download the latest episodes as and when they appear. This ensures I have plenty (and usually too much) to listen to for any length of journey.

Nik Rawlinson

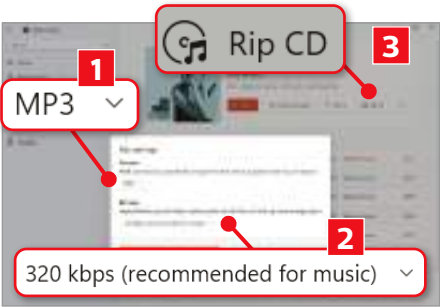


Bitrate	AAC	MP3	FLAC	WMA
96Kbps	5,714 (476)	-	-	-
128Kbps	4,312 (359)	4,359 (363)	-	4,324 (360)
256Kbps	2,209 (184)	2,191 (182)	-	-
320Kbps	-	1,756 (146)	-	-
Lossless	-	-	601 (50)	-

could take your entire music collection with you in AAC or MP3 format at 256Kbps. And even if you converted everything using 320Kbps MP3, you'd still have room for more than 140 of your favourite CDs.

Once you've decided which settings you want to use you should check that Windows Media Player is set to rip at your chosen quality level. Insert the CD you want to rip into your disc drive and, when it's been recognised, click its name in the Media Player sidebar. Next, click the three dots ('...') above the track listing and select 'Rip settings', then use the dropdown menus to select your options.

We've selected MP3 as our format (1 in our screenshot below), and a bitrate



Majority's music player can rip music at several quality levels

Bitrate	AAC	MP3	FLAC	WMA
96Kbps	15 days, 16 hours	-	-	-
128Kbps	11 days, 20 hours	11 days, 23 hours	-	11 days, 20 hours
256Kbps	6 days, 1 hour	6 days, 14 minutes	-	-
320Kbps	-	4 days, 20 hours	-	-
Lossless	-	-	1 day, 15 hours	-

of 320Kbps 2, which Media Player recommends for music. Click Save, then click the Rip CD button 3 that appears to the left of the three dots.

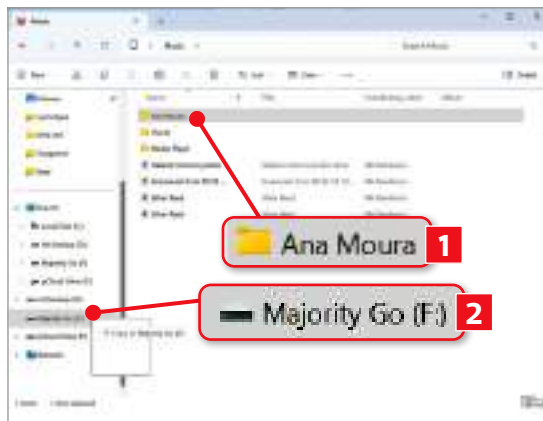
2 Transfer your music to the player

Windows Media Player rips your CD's tracks to Windows' Music library. You'll find this by opening File Explorer, where Music will usually sit in the left-hand sidebar. If you've changed your settings so that the Music library doesn't appear in the sidebar, click the '>' to the left of Home in the address bar and select Music from the menu that appears.

When the folder opens, you'll notice that your music is organised into folders for each artist, with sub-folders inside for albums. While this helps you to navigate your music using File Explorer, Windows Media Player will have tagged your music when it ripped it with the album name, track name and artist, as well as the track's position in the album's running order. All this information can be used by your MP3 player to help you navigate your music, even if you don't preserve the exact file and directory structure as it's presented in Windows.

Connect the MP3 player to your computer using the USB-C cable it came with and wait for it to appear in the File Explorer sidebar. When it does, select either an artist folder, or one or more of the album folders inside it (1 in our screenshot above right), and drag it on to the Majority Go entry 2 in the File Explorer sidebar (or the name of your

To transfer your music to the MP3 player, simply click and drag it on to your player in the sidebar



This Bluetooth transmitter is broadcasting on 108FM

MP3 player, if it's different).

Windows will show a progress box through which you can monitor the transfer. When it's finished, right-click your MP3 player in the sidebar, then click Eject. When it disappears from the sidebar, you'll see that it briefly displays the word Searching on the screen of the player itself as it re-indexes your music. At this point, you can disconnect it from your PC.

3 Charge the music player in your car

You're now ready to transfer the MP3 player to your car, so you need to consider two things: how you're going to connect it to the car radio, and how you're going to top up the battery when out on the road.

The second of these is the simplest fix: if your car has a 12V socket or cigarette lighter, you should be able to use that to send power through a USB cable. All you need is a USB adapter, such as this popular £7.50 model from Lisen: www.snipca.com/51788 (pictured below). It has both USB-C and full-size USB sockets. But before buying one, check that your car doesn't have an integrated USB charge port that you can use directly.



This £10 USB car-charger adapter will charge your MP3 player as you drive



The Majority MP3 Player will search for your car when connecting via Bluetooth

4 Connect via Bluetooth

When playing music on your car radio, you have several options. Some vehicles support direct Bluetooth connections, even if they don't have full-colour touchscreens. As the Majority player has Bluetooth built in, it makes most sense to use this connection if you can.

Before you can stream from a Bluetooth device to a Bluetooth radio, you need to pair them, just as you would pair a speaker to the MP3 player. This requires that you set your devices to search for one another and authorise the connection. Open the player's Bluetooth menu and select 'Search for devices'. If the player can detect the car it'll appear on screen (as pictured above). Likewise, the car will detect the player. You should then be able to connect them.

5 Broadcast your music player through FM

Your second option, if your car lacks Bluetooth, is to use a radio adapter. These connect to your media player using either a 3.5mm cable or Bluetooth and transmit your music on FM (as pictured above right).

You just need to set the frequency on the transmitter to an unused frequency in the area where you're driving, and tune your radio to the same frequency to pick

up the music playing on your device.

Such transmitters are usually powered by the car's 12-volt socket. So, if you're planning to use this to also charge the music player, look for a transmitter that has pass-through USB ports.

If you don't have an FM transmitter with Bluetooth, consider this popular Lencent model, which costs £13.99 on Amazon: www.snipca.com/51938.

6 Use an auxiliary-in jack

Finally, some cars have auxiliary connectors, which let you connect a 3.5mm audio jack to a factory-fitted socket that's wired to the radio. If you suspect you may have one but you're not sure where it is, first check whether your radio supports auxiliary input (sometimes labelled AUX IN or Auxiliary In) by pressing the Source button several times to scroll through the options. If this entry doesn't appear, it's unlikely your car has the necessary socket.

While it makes a lot of sense to use an FM transmitter to establish a wireless connection between the player and the radio, you may want to opt for the jack-to-auxiliary port connection (pictured below). This will save you needing to change the frequency on both the transmitter and radio if you drive into the broadcast area of a station using the frequency you've previously selected.



The auxiliary input socket lets you connect the MP3 player and car radio using a 3.5mm jack

Use Arc's 'spaces' tool to improve your browsing

What you need: Arc

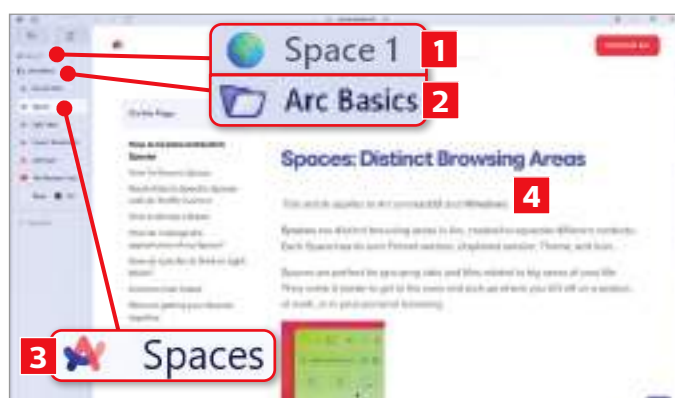
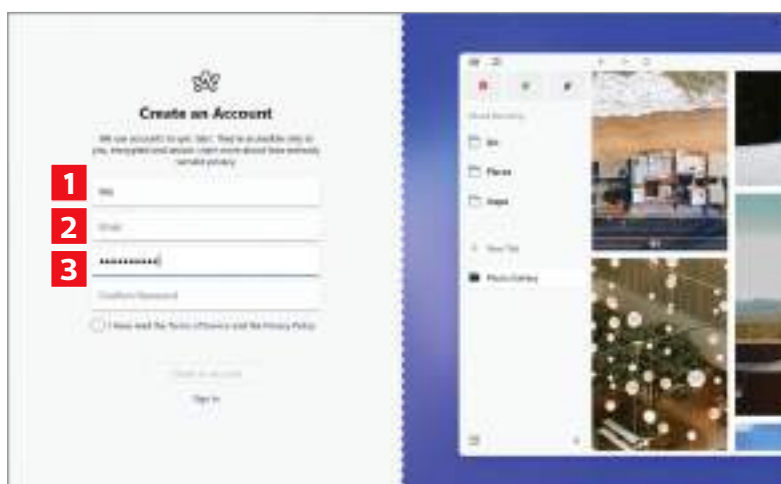
Time required: 20 minutes

The Arc Windows browser was released in April. It's based on the Chromium **code** and works with Chrome extensions. What sets Arc apart from other browsers is that it recognises that we often use related web pages simultaneously. To address this, its developers have come up with the

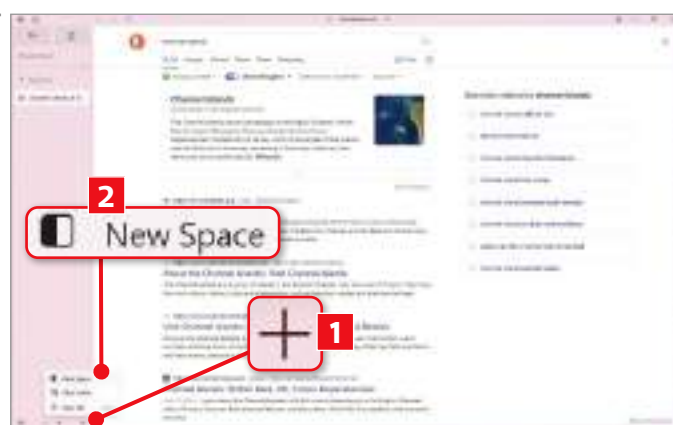
clever idea of 'spaces', which you can use to group collections of web pages – within tabs – that relate to a particular task, subject area, project and more. Here, we explain how to use Arc's 'spaces' feature to group your tabs, see them in split-screen and organise them into folders.



STEP 1 First, download Arc from www.arc.net. You need a free Arc account to get set up. To get one, double-click the 'ArcInstaller.exe' file in your Downloads folder and, on the first screen, enter your name **1** and email address **2**, and provide a password **3**. Your account is used to sync the browser if you have it installed on multiple computers. Work through the rest of the onscreen instructions, which offer to import your passwords from an existing browser, enable **AI** features, and make Arc your default browser. Each of these is an option, rather than a requirement.



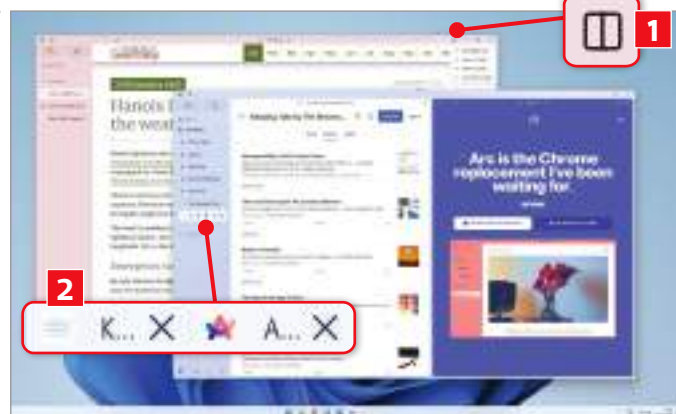
STEP 2 Arc organises your tabs in the sidebar, where they sit within defined 'spaces'. Each space can relate to a specific task or context of your choosing. So, if you were shopping for a new car, you could create a space for that task, and your car reviews, forums and links to dealers would be kept separate from those relating to, for example, work or holiday planning, which could have their own dedicated spaces. You'll notice that Arc sets up a space called Space 1 **1** by default. Click the Arc Basics folder **2** within that to reveal its contents. You can click the Spaces tab **3** to read more about the Spaces feature in the main browser window **4**.



STEP 3 To create your own space, click the plus (+) button at the bottom of the sidebar **1** followed by New Space **2**. Give your space a name that relates to how you'll use it and click Create Space. Press Ctrl+T to create your first tab in the new space, then either type a web address into the floating address bar or, if you don't know where you want to go, enter a search term and press Enter. Note, if you enter the name of an existing space as your search, you'll switch to that space rather than carry out a search.

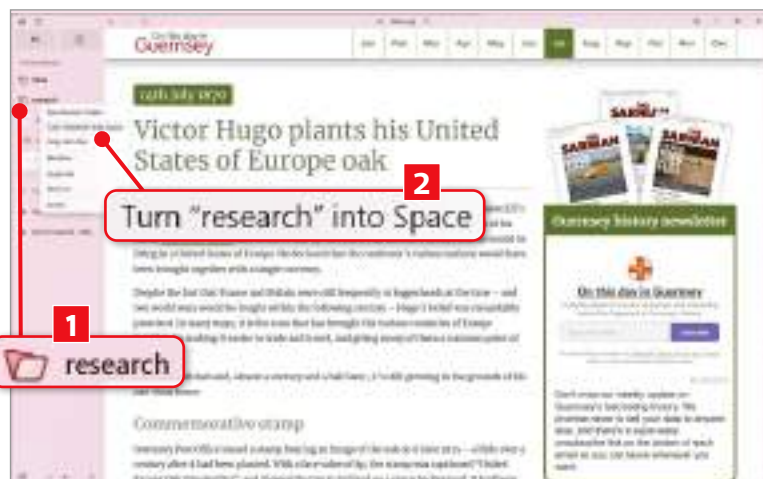


STEP 4 Hold down the Ctrl key while clicking links on a page to open them in new tabs within the same space – they'll then be added to the sidebar **1**. Having added a second space you'll now see a couple of icons at the bottom of the sidebar representing the two active spaces **2**. You can click these to switch between them. If you have several spaces and want to switch between them directly, you can also use the keyboard shortcut control Alt+left and right arrows to navigate left and right or hold down Alt and press the number of the space (1, 2, 3 and so on).



STEP 5 On occasions you may want to open two tabs and show their contents side by side, to compare them or to reference one while working in the other. Click the Split button **1** at the top and select where you'd like the second pane to appear, then type a web address or search term in the address box that pops up, as you did in Step 3. When you have two pages open side by side, they appear next to each other within the active space in the sidebar **2**.

STEP 6 It's all too easy to open more tabs than you need when you're looking for a specific piece of information. To get rid of any you no longer require, hover over them in the sidebar and click the 'x' that appears **1** or click Clear **2** to close every tab other than the one you're currently viewing. You can also organise tabs into folders by hovering over the space name **3** and clicking Edit followed by 'New folder'. Give the folder a name, then drag the relevant tabs into that folder.



STEP 7 Over time, as the contents of a folder grow, you may realise that the tabs it contains would be better organised if they were given a space of their own. To do this, right-click the relevant folder **1**, then click 'Turn [name of folder] into Space' **2**. If you've finished working with a space and the pages it contains, you can delete it. To do this, hover over the space name and click Edit, then click Delete Space followed by Delete.

Readers' Tips

TIP OF THE FORTNIGHT

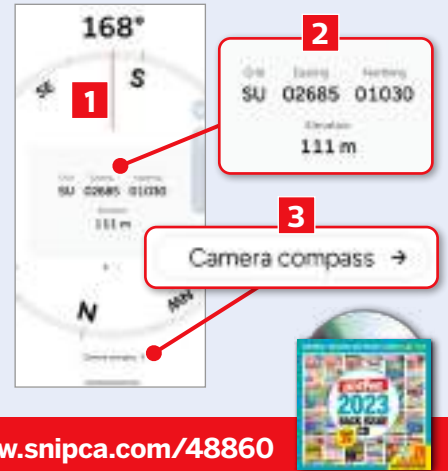
Use Ordnance Survey's new Locate Me tool

In Issue 692's Letters John C Kent says that OS Locate doesn't work outside of the UK. He might not realise it, but buried in the settings is an option to read longitude and latitude when abroad. But in any case, readers should stop using OS Locate because Ordnance Survey has discontinued it (see details at www.snipca.com/51923). Instead, it has compiled the features into a new tool called Locate Me, and added them to the official OS Maps app (<https://osmaps.com>).

When you open the OS Maps app you should see a notification at the top telling you to open Locate Me. This takes you straight to the compass that you could previously open in OS Locate (1 in our screenshot), with the map grid references in the middle (2). Tap 'Camera compass' at the bottom (3) to turn on your camera and see your compass overlaid on top.

To open Locate Me at any time, tap the three dots top right from any page showing a map.

Keith Fisher



Keith wins a copy of our 2023 Back Issue CD

Buy it from us at www.snipca.com/48860

HARDWARE

Use cooling pad to lower your laptop's temperature

✓ Following Robert Irvine's column on using software to cool his laptop (Issue 691, page 74), he might want to use a cooling pad instead, such as the Cyclone model from Klim (£25 from Amazon, www.snipca.com/51909, pictured below). I've used it for some years on



both my Windows and Linux laptops and it's really benefited me. You can adjust the stand for maximum comfort.

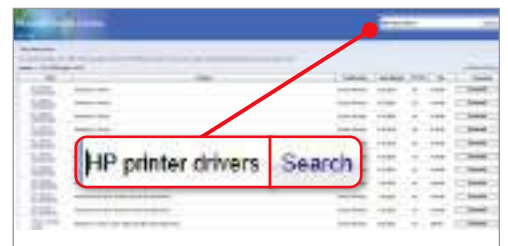
Chris Burjmaster

PRINTERS

Install drivers to get old printers working

✓ I've been reading with interest in recent issues about readers using old printers with modern PCs. I've been using an old mono Tally T9115 laser printer for many years. I don't know how old it is, but the newest driver I have is for Windows XP.

I still have spare cartridges, so was looking for ways to keep using it with my Windows 10 PC. I read somewhere that



there are only two internal systems for mono lasers, one for Brother's system, the other HP. I tried installing various drivers from Microsoft's Update Catalog (www.snipca.com/51918, see screenshot above) and found a couple of the HP drivers work fine. The one I use is HP LaserJet II. So try different drivers on your old printer – you might get lucky.

Paul Whatmore

Why I stopped using...

Samsung phones with Three

✓ Lots of readers recently have spoken about the savings they've made by cancelling their contract with one of the big four phone networks and moving to a smaller and cheaper network. I feel I've made a double saving by switching my phone as well as my network.

And what I use instead...

After 10 years of using Samsung Galaxy phones, I felt like I didn't need all the new tools being added to them. I'm baffled by features like 'Circle to

Search' and 'generative image editing'.

I needed a phone that was simpler yet hardy enough to withstand the occasional bump and graze during my outdoor rambling. The solution was the SIM-free **Nokia XR20**, which cost me £180 outright for 128GB storage (www.snipca.com/51913, pictured).

It's easy to use, and the screen is well protected by Corning **Gorilla Glass Victus** – you can learn more about that at www.snipca.com/51914. I get cheap deals by hopping between the likes of Lebara, Giffgaff and Tesco Mobile.

Kim Sinclair



Tell us why you stopped using a website, app or program: letters@computeractive.co.uk



NETWORKING

Use smart plugs to check your router's power

✓ For several months my home network would drop out randomly, particularly while streaming motorcycle racing on Eurosport. Sky told me to reset my router, but this solution resolved the problem for only a day. A Sky engineer then installed two SE210 boosters, but this didn't work, and nor did a visit from an Openreach engineer.

A few days later, I managed to secure another visit from the same Sky engineer. He replaced the cable between my router and the (copper) Openreach box. Things seemed to improve but again for less than a day.

I then had the idea of installing one of my Tapo P110 smart plugs (£33 for four from www.snipca.com/51912, pictured above) in the powerline feeding my router. This turned out to be a good move. A recent **firmware** update gives the P110 the ability to measure power down to single figures of watts.

The router power supply was shown to draw between eight and nine watts normally, but this one was regularly dropping below three watts, which coincided with my network dropping out.

I had another power adapter of the same rating and DC-connector type from a previous Sky router. I used this instead of the existing adapter, and in the week since I've had no problems.

Chris Marshall

BACKUP

Clone your hard drive in case of attack

✓ I've come up with what I think is a simple solution to being hacked or my hard drive failing. I connect a blank hard drive to my PC using a USB-to-SATA

Reader recommends...

Soundcore Boom 2 speaker

£120 from Amazon www.snipca.com/50844

✓ I read in Issue 687 (page 28) that you gave a 'Recommended' award to the Soundcore Boom 2 Bluetooth speaker. I needed a new speaker, so decided to trust your judgment – and I've not been disappointed. It's easily the best speaker I've ever had, with amazing fidelity in the high range, while also offering overpowering bass.

I measured its base range and it reached as far as 50Hz before losing volume, and going silent at 35Hz. Those are impressive numbers from a speaker as small as this.

It's also astonishingly loud. I can play music in a crowded room with everyone dancing and have volume to spare. Amazingly, it has no distortion



even at max volume.

I also love its light and equaliser controls within the app, as well as the 12-hour battery life.

Thanks for the recommendation!

Maldon Sanderson

✉ Want to recommend hardware or software to fellow readers?
Email letters@computeractive.co.uk



adapter (£4.95 from www.snipca.com/51917, pictured above), then use either the software Macrium Reflect (www.macrium.com) or DiskGenius (www.diskgenius.com) to create a **clone** of my entire internal hard drive.

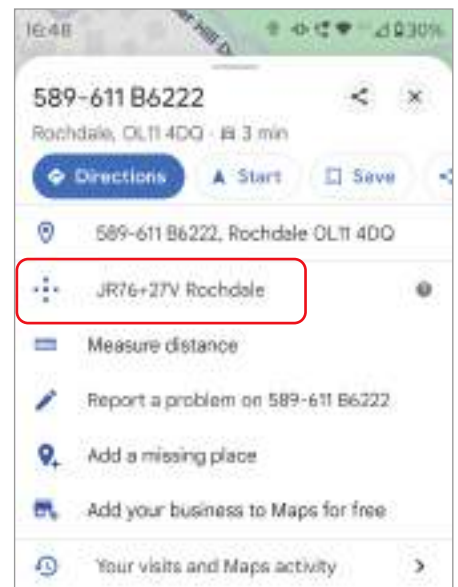
This means that even if my computer is attacked or the hard drive fails, I simply replace the hard drive with the cloned copy. Once the computer is up and running again (in good health) I then clone the backed-up hard drive on to the one that had been attacked.

David Clowes

APPS

Give emergency services your location through Google Maps

✓ I wanted to add to the recent discussion on how to best tell the emergency services that you are stuck up to the waist in a peat bog on the Isle of



Muck. If you have the Google Maps app, simply tap the blue dot that shows your position and then scroll down to the where there's an icon with four round dots around a square dot – in a plus-sign formation. The code to the right of it (see screenshot above) works the same way in Google Maps as the three words do in the What3Words (www.what3words.com).

Just read that to the emergency services and they'll have you out of the bog, showered and smelling like roses again in no time.

Carlos Nicoya

Browser Tips

CHROME

Chat with Google Gemini in a side panel

Google has been surprisingly hesitant about adding its AI assistant Gemini to its Chrome browser. While Microsoft's Copilot AI tool is now firmly ensconced in Edge, and Brave and Opera have their Leo and Aria chatbots respectively, to interact with Gemini you need to type @ into Chrome's address bar and click 'Chat with Gemini'.

Entering a query then opens the Gemini website (www.snipca.com/51894) in a new tab, which is less convenient than the 'browsing companion' experience

offered by other AI assistants. Until Gemini is properly integrated with Chrome, you can make interaction easier by installing the unofficial extension 'Side Panel for Gemini' (www.snipca.com/51895).

Click its toolbar button – which looks like a sunglasses emoji (1 in our screenshot below) – and Gemini will open in the browser's side panel. Provided you're signed into your Google account, you'll be able to start chatting immediately, either by typing a text prompt, uploading an image or clicking the microphone icon to speak your query.

When you close the side panel, your

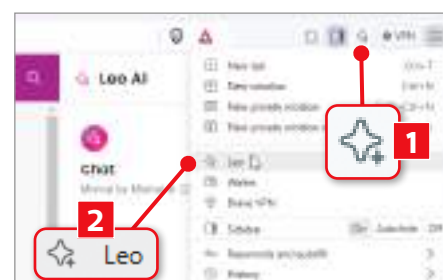
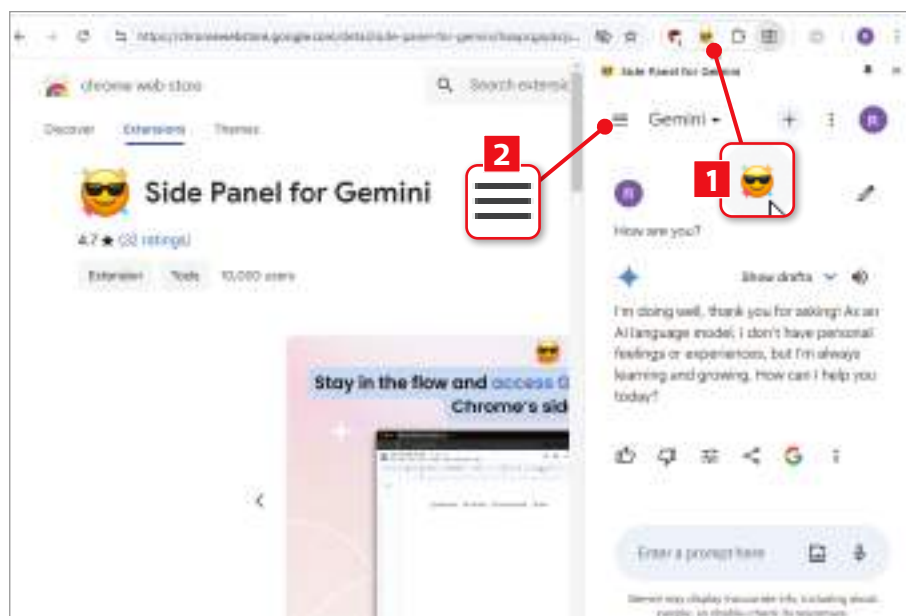
Gemini chat will be reset. You can revisit past interactions by clicking the three-line menu button in the panel's top-left corner (2).

BRAVE

Access AI assistant Leo with one click

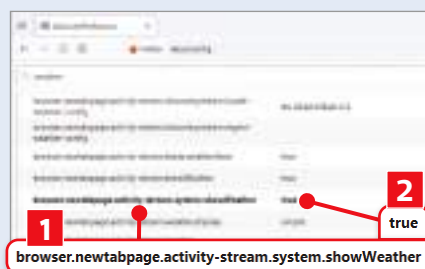
As if to show Google the right way to integrate an AI assistant (see previous tip), Brave 1.69.153 (released 22 August) adds new shortcuts for launching its Leo chatbot. In addition to clicking the Leo button on the browser's right-hand sidebar (a star with a plus sign) (1 in our screenshot below),

Additionally, a new Leo option has been added to Brave's main menu (2), which you open by clicking the three-line button. The other Leo shortcuts can be removed by right-clicking them and choosing 'Hide Leo AI icon' or Remove, but the menu option is permanent. It's joined by more prominent entries for Brave's Wallet and VPN features.

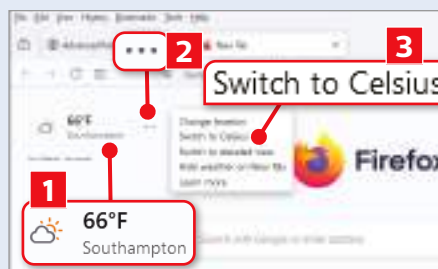


WORKSHOP Activate the new weather widget in Firefox

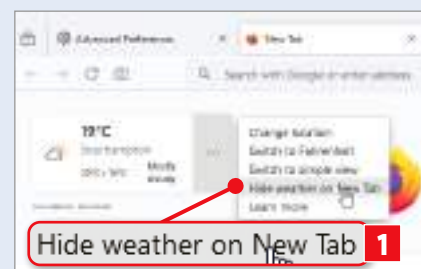
Mozilla is testing a new feature in Firefox that displays a weather widget on your New Tab page, showing the forecast for your location. It's currently disabled by default, but here's how you can activate it in the browser.



1 Type `about:config` into Firefox's address bar, press Enter and click 'Accept the Risk and Continue'. Find the preference `browser.newtabpage.activity-stream.system.showWeather` (1) and double-click it to change its value to 'true' (2).



2 Open a new tab, and you'll see the weather widget in the top-left corner, showing the temperature and conditions for your location (1). Click the three dots next to this (2) to switch from Fahrenheit to Celsius (3), and display a more detailed view.



3 For a full forecast, click the widget to open AccuWeather (which provides the weather data to Firefox). To disable the new feature, either click 'Hide weather on New Tab' in the three-dot menu (1) or change the value's preference back to 'false'.

BEST EXTENSION FOR...

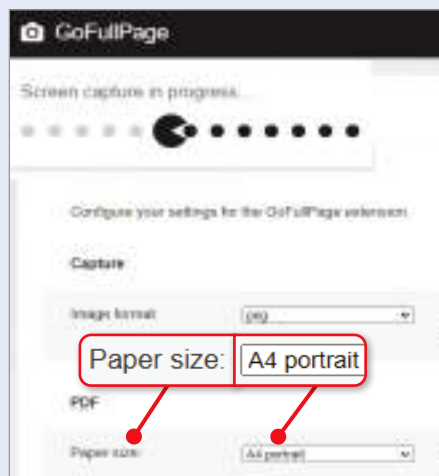
Capturing full-page screenshots

GoFullPage

Chromium

www.snipca.com/51910

Firefox includes the handy option to take screenshots of entire web pages, not just the area currently visible in your browser. GoFullPage adds the feature to Chrome, so you can capture everything on a page in one go. Just click the extension's toolbar button or press Alt+Shift+P to take a screenshot of the whole page and open the result in a new tab. You can then save the image in **PNG** or **JPEG** format, or export it as a PDF – go into GoFullPage's options to specify your preferred size and orientation (see screenshot).



The extension also includes options to annotate screenshots, blur sensitive information and add the date, time and URL to the top or bottom. However, to save these edits you need to sign up for a Premium account, which costs \$1 (around 76p) a month.

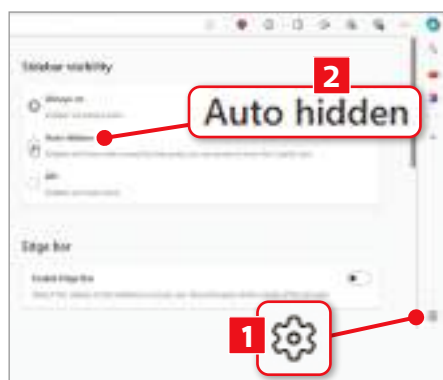
If you don't like that, try...

FireShot

Chromium

www.snipca.com/51911

FireShot lets you capture entire web pages or just the visible part, and offers lots of saving options, but it's not as fast as GoFullPage.



EDGE

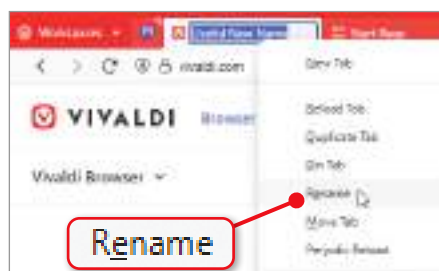
Hide and display the sidebar more easily

Edge's right-hand sidebar provides shortcuts to various Microsoft tools, but not everyone finds it useful, especially because it takes up valuable screen space.

In recognition of this, Microsoft will soon hide the sidebar by default for new Edge users and those who have previously disabled the bar and don't want it restored by a browser update.

It has also made it easier to access the sidebar's settings, so you can decide whether to show or hide the feature in Edge. Simply click the cog button at the bottom of the bar (1 in our screenshot above) to open the Sidebar settings.

Here you can set the sidebar to be 'Always on' or permanently 'Off'. Alternatively, choose 'Auto hidden' (2) so the bar only appears when you click the Copilot button in the browser's top-right corner.



VIVALDI

Give your tabs descriptive names to identify them faster

Vivaldi 6.9, released at the end of August, adds the ability to give your tabs different names. This is useful for web pages that don't have descriptive titles, because it will help you identify them faster, and for sets of search results. It also works for groups of tabs you've created using the browser's Tab Stacks feature.

Simply right-click a tab or tab stack, select Rename (see screenshot above) and type the replacement title you want to use. Press Enter to confirm. The new name will remain until you close the relevant tab or stack, and even after you restart Vivaldi – unless you've set tabs to close automatically when you exit. It will also be retained for tabs you bookmark and pin in the browser.

CHROMIUM

Customise your New Tab page with Microsoft WowTab



Microsoft has released a new extension called WowTab (www.snipca.com/51919),



which lets you customise your New Tab page with attractive photos and a host of useful features. It uses high-quality wallpapers from Bing that you can either set to change daily or apply manually through the extension's Settings.

Click the cog in the top-right corner (see screenshot above) and select Wallpapers to choose a background from dozens of static and dynamic (moving) designs, or click Local to upload one of your own. Select 'Websites' to decide which shortcuts appear on your New Tab page – these include news sources, social-media sites and AI tools.

WowTab also includes widgets for adding the weather forecast, your browser bookmarks and a white-noise player to the page, among other options.

On the downside, you can't change the default search engine from Bing, and the extension's description on the Chrome Web Store is written in Chinese. This suggests it's from the same Microsoft division as the clean-up tool PC Manager. Thankfully, the actual add-on uses English and VirusTotal says it's safe (see www.snipca.com/51908).

Phone and Tablet Tips

ANDROID & iOS

Scan documents to JPEG format in Google Drive



The Google Drive app for Android (www.snipca.com/51753) and iOS (www.snipca.com/51754) now lets you save documents you scan with your phone's camera in **JPEG** format, as well as PDF. This creates smaller files that are easier to store and share, and edit in an image editor.

To scan a document to Google Drive, either tap the camera button in the bottom-right corner of the app or press the plus sign and choose Scan. Point your camera at the item you want to digitise and hold your phone still.



Google Drive will automatically detect the borders of the document and scan its content. You can then edit the result to enhance, crop and rotate the image, and remove any blemishes.

Tap 'Done' to save the file to Drive, and choose JPEG rather than PDF (see our screenshot below left) before you press Save.

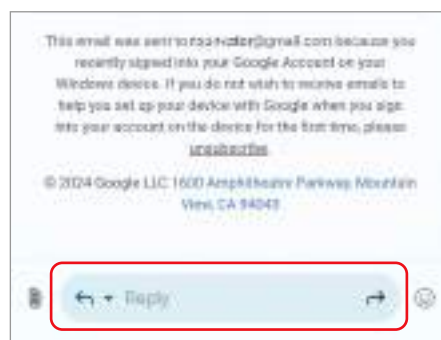
ANDROID

Reply to emails instantly in Gmail



When you only need to send a brief response to an email, having to compose a new message to do so can be cumbersome and time-consuming. To speed things up, the Gmail app for Android (www.snipca.com/51927) now lets you write and send replies directly from the original email or conversation.

Instead of pressing Reply or Reply All to open a compose screen, you can now type your response into a text box below the main email (see screenshot below). Press the Send button next to this box to



send your reply without having to open a new screen.

The new box also includes options to forward messages and attach files, though tapping those icons switches to the standard compose screen. If you're too busy to write even a short response, you can tap the smiley-face icon to respond with an **emoji** instead.

Google says the quick-reply feature will be added to the iOS version of Gmail later this year.

ANDROID

Download three apps at once from the Google Play Store



In Issue 684 (page 45), we reported that Google had updated its Play Store app to let you download two Android apps simultaneously. Previously, you had to wait until an app or game had finished installing before a subsequent download could begin – in the meantime, it was shown as 'pending'.

Four months later, Google has changed



BEST NEW APPS

What you should install this fortnight

ElevenLabs Reader

Free

Android www.snipca.com/51933

iOS www.snipca.com/51934

ElevenLabs Reader uses **AI** to convert text into speech – be it a web page, ebook,



PDF or something you write. As well as natural-sounding British and American voices, you can choose 'iconic' options such as Sir Laurence Olivier, Judy Garland and (oddly) James Dean. You need to create a free account to use the app.

Organic Maps

Free

Android www.snipca.com/51915

iOS www.snipca.com/51916

This private alternative to Google Maps has no ads or trackers, but lots of useful features



including offline navigation, cycling routes and hiking trails. The latest update adds street-name announcements for walking directions, speed-limit and traffic-light icons in car-navigation mode, and new data from OpenStreetMaps.

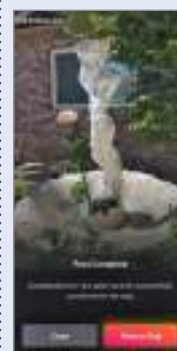
Scaniverse

Free

Android www.snipca.com/51921

iOS www.snipca.com/51920

Scaniverse lets you scan objects in high-quality 3D, then edit and enhance the



results – which it calls 'splats' – and share them with other people. The iOS version has been updated to improve the 3D-scanning process and the option to add your splats to a map, so other users can see where the objects were captured.

its rules again, so you can download or update three apps simultaneously. This is particularly useful when setting up a new phone or tablet, because it saves you time when installing your favourite apps.

As before, you can check the status of your downloads in the Google Play Store app (see screenshot below left), and on your home screen – where the app icons will be labelled ‘Downloading’ and surrounded by download-progress rings.

iOS Lock and hide your private apps in iOS 18

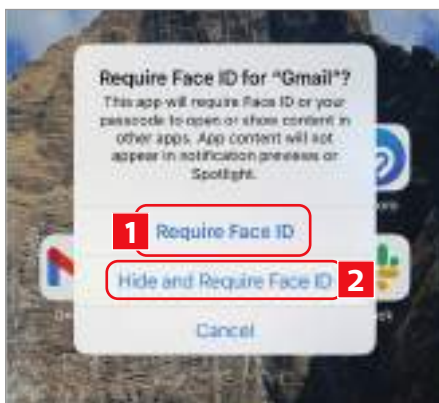
By the time you read this, Apple will have released the latest version of its mobile operating system, iOS 18. We’ll write about all its best new features in the next few issues, but one that immediately caught our attention is the ability to lock and hide specific apps.

Not only does this protect your private photos, videos and documents, but it also stops anyone making purchases, sending messages or posting content on social media without your knowledge or permission. It’s particularly handy if your young children or grandchildren sometimes borrow your iPhone or iPad.

To lock an app in iOS 18, long-press it and tap Require Face ID (1 in our screenshot below) – you’ll need to set up the facial-recognition feature if it’s not already enabled. Tap the option again to confirm, and the app will now be locked to everyone but you.

To hide the app, long-press it and select ‘Hide and Require Face ID’ (2), then Hide. Confirm you want to hide the app and it will be moved from your Home screen to a Hidden folder in your App Library, which can only be unlocked with your face or passcode.

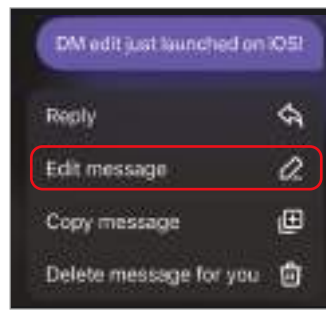
You can remove protection from an app by long-pressing it, choosing Don’t Require Face ID and verifying your identity.



iOS Edit your direct messages on X

Although X (formerly Twitter) now lets you edit your posts (formerly tweets) for up to an hour after they’re published, the option is limited to users with an X Premium subscription. But after a surprising – and welcome – update, it’s now possible to edit your direct messages (DMs), though currently only in the X app for iOS (www.snipca.com/51932).

Simply open a direct-message chat in



the iOS app, and either long-press a message you’ve sent or tap the three-dot menu next to it. Select the ‘Edit message’ option (see screenshot left) to modify the text in the DM (you can’t edit any images you’ve sent).

There’s no time limit on editing direct messages, but you can only make five changes per DM. X says the new option will be “coming soon” to its Android app and website.

BEST APPS FOR...

Scanning your Android apps

VirusTotal

Free

Android www.snipca.com/51935

The Android version of VirusTotal (Apple doesn’t allow iOS apps that scan other apps) checks the security of all the apps on your phone or tablet using more than 75 antivirus engines. It informs you of malware threats it’s detected, highlights suspicious permissions and lets you upload unknown APK files for analysis.

Best For Scanning for malware



Permissions Checker

Free

Android www.snipca.com/51936

Permissions Checker scans all the app permissions on your Android device and categorises them as risky, normal or unknown. Select a permission – such as ‘Record audio’ or ‘Directly call phone numbers’ – to see which apps it’s been granted to, and either revoke unnecessary permissions or uninstall privacy-compromising apps.

Best For Checking app permissions



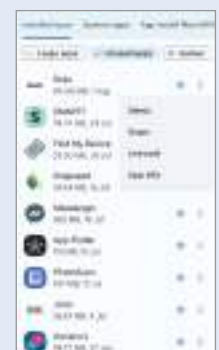
Files by Google

Free

Android www.snipca.com/51939

One of the many useful features in ‘Files by Google’ scans your phone or tablet to tell you which apps are taking up the most space. Press the Apps tile on its home screen and sort the list of installed apps to show the largest or least-used. Tap the three-dot icon next to an app to view more information, clear its cache or uninstall it.

Best For Identifying storage hogs



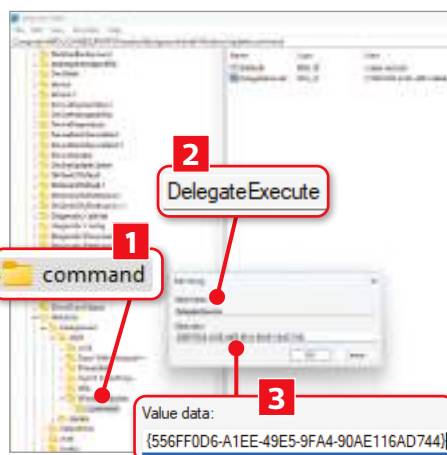
WINDOWS 10 & 11

Add right-click shortcut to Windows Update settings



With a quick registry hack you can add the option to open Windows Update settings to your right-click menu. First, search for and open registry editor, then in the address bar at the top type **Computer\HKEY_CLASSES_ROOT\Directory\Background\shell**. Press Enter, then right-click 'shell' that's highlighted in the menu under the Background heading and select New, then Key. Now name it **Windows Update** (or whatever name you prefer – this is what will appear in your right-click menu).

Now right-click the key you just created, then select New, Key again and create a new key called **command** (1 in our screenshot below). Right-click the 'Open Windows Update' key once more, and this time select New, then String Value, and type **SettingsURI** in the box that appears on the right.



Double-click 'SettingsURI' and in the 'Value data:' box type: **ms-settings:windowsupdate**. Click OK. Now right-click the 'command' key on the left, then click New, then String Value and type **DelegateExecute** (2). Now double-click this then visit our Pastebin page (www.snipca.com/52014) and copy the code there. Go back to the registry and paste this code into 'Value data' (3). Click OK, close the registry then restart your computer.

WINDOWS 11 INSIDER

Reverse the scrolling direction on your mouse



Microsoft already lets you change the scrolling direction of laptop trackpads – so moving two fingers down moves your screen up, and

WINDOWS 10 & 11

Change colours of map in Weather app



Microsoft's Weather app gives you a choice of five colour schemes to show rain and snow on its map. Click the Map icon (1 in our screenshot) followed by the palette icon (2), then

choose a style from grey, green, blue, white or yellow (3). As you change colour, you'll also see the key change at the bottom (4). In our example, we've changed the default green colour to blue.



vice versa. This suits some people better than the default setting of moving your fingers down moves the screen down.

Insider Build 22635.4145 brings this option to scrolling with your mouse wheel. Press Windows key+I, then click 'Bluetooth & devices' (1 in our screenshot above). Scroll down in the centre then click the Mouse heading. Now click the 'Scrolling direction' dropdown menu and choose 'Down motion scrolls down' or 'Down motion scrolls up' (2).



This tool, previously called Your Phone, also lets you send texts and make calls through your computer. It works only on Android for now.

Follow Microsoft's instructions for setting it up (www.snipca.com/52012), then on your computer right-click a file you want to share. Now click the 'Share' option in the menu that appears, then look for the Phone Link option in the 'Share using' section (see screenshot above). Microsoft is rolling out this tool gradually, so keep checking every few days if it's not there when you first look.

MICROSOFT WORD

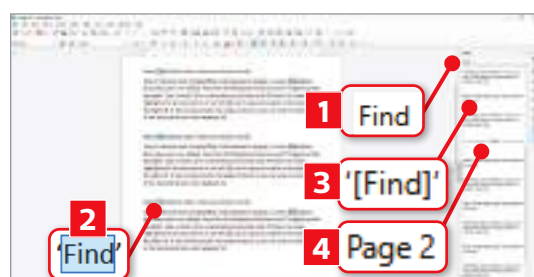
Delete all formatting from pages

W You can delete pages in Word by highlighting the contents and pressing Delete on your keyboard, but this doesn't remove formatting such as page breaks, headers, footers and margins. To get rid of *all* elements from a page, place your

cursor on it then press Ctrl+G. This brings up the 'Find and Replace' menu, with the 'Go To' tab open (1 in our screenshot). Now type \page in the 'Enter page number' box (2) and press Enter to select all the content on the page.



Finally, click Close (3) to shut the 'Find and Replace' box, then press Delete on your keyboard.



LIBREOFFICE WRITER

Keep 'Find' sidebar open when searching for words

LO One of the best tools in LibreOffice 24.8, released in August, is a new Find option that stays open in a sidebar. Press the Alt+9 keyboard shortcut and it'll appear at the top right. Type a word (1 in our screenshot above), press Enter, and it'll show the word highlighted in the document on the left (2) and in square brackets in the sidebar on the right (3). It also breaks results into page sections, so you can see on which page of the document your word appears (4).

MICROSOFT EXCEL

Neatly align your data in cells

X Microsoft Excel lets you position text in the centre of a cell by merging a number of separate

cells. This is handy if you want to place a heading over several rows of data so it sits neatly above them all.

First, type a heading then select the cells you want to merge. In our example, we typed 'Q3 2024 Sales Figures' (see screenshot 1 below left) above data for July, August and September. We then selected the cells A1, B1 and C1 to merge. Next we opened the Home tab at the top, then clicked 'Merge and Center' in the Alignment section. The three cells were then merged, centring our heading directly above the data (see screenshot 2 below right).

ONLYOFFICE

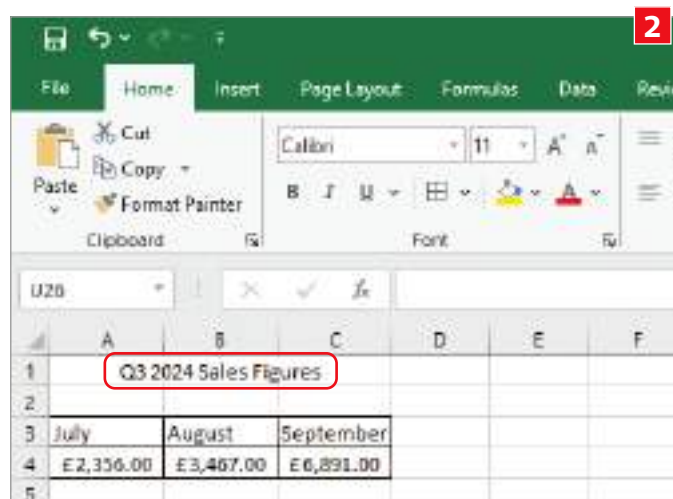
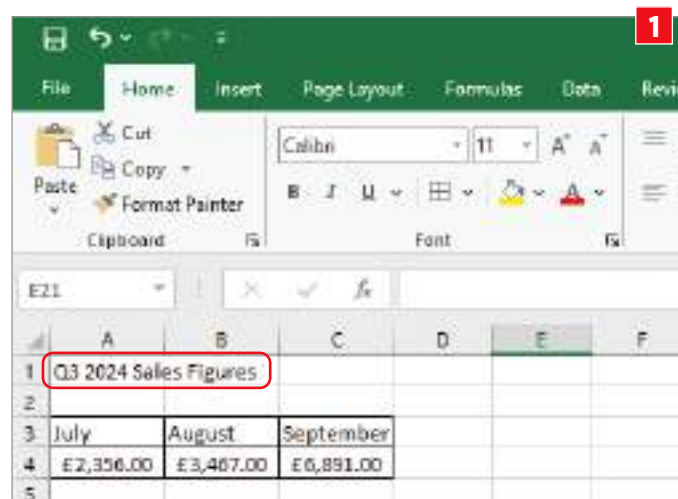
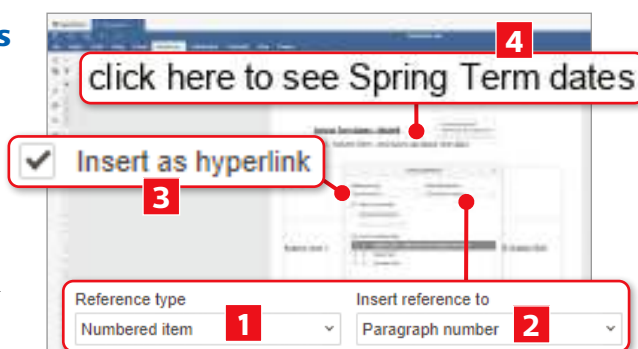
Cross-reference points of interest in documents

OO OnlyOffice has a cross-reference tool that lets you skip to related parts of a document. First, place your cursor where you want to insert a cross-reference. Next, click the References tab at the top, then select 'Cross-references'. This brings up a menu where you

can select the type of reference (such as a numbered list, image or a footnote, 1 in our screenshot below), and how you want to refer to it (such as with a page number, paragraph number (2)).

Keep the **hyperlink** option ticked (3) so you can jump to the cross-referenced text by holding down Ctrl and clicking your mouse. Once you've decided your style, press the Insert button. In our example, we've used school term dates for the 2024/25 academic year in a numbered list separated by tables. We chose 'paragraph number' in the 'Insert reference to' box because our boxes are acting as paragraphs.

Finally, change the link to say whatever you like. In our example, we typed 'click here to see Spring Term dates' (4).



In The Club



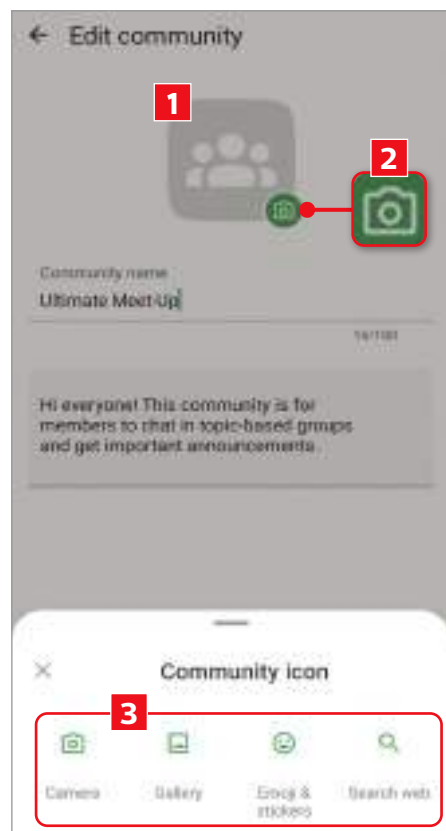
Run a club or society? Here's how your tech can make it easier

Create an event in WhatsApp Communities

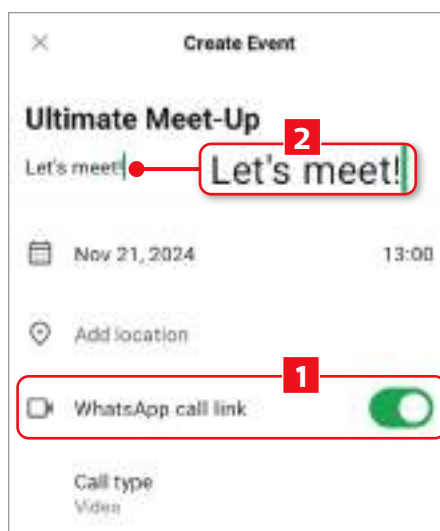
One of the best tools in WhatsApp is Communities, letting you bring together related groups under a single umbrella. For example, you could run several groups based in towns or cities, but also set up a larger 'county' community to bring these groups together. You can then send messages to all these groups and – using a new option – announce events coming up. You can add up to 100 groups per community, with a maximum of 2,000 members allowed.

Set up a community

First, we'll explain how to set up a community. Tap the Communities icon at the bottom of the main WhatsApp page. Next, click 'New community' at the top followed by 'Get started' at the bottom. Now give your community a name (we're calling ours 'Ultimate Meet-Up') and tap the green button containing a white arrow.



You can add a club logo to your community using photos, emojis or images from the web



You can add a link to a video chat in WhatsApp or another video-chat service

Now tap the name of your community to open it, then the three dots at the top right. This gives you options to edit your community's information, add groups and invite people. To add a club logo, tap 'Community info' then tap the blank icon at the top (1 in our screenshot left), followed by the green camera icon that appears at the bottom right of the icon (2. Now tap an option at the bottom (Camera, Gallery, 'Emoji & stickers' or 'Search web' 3) to find an image.

There are two main parts to your community: Announcements and General. Announcements is only visible to you as the creator of the community, and is indicated by a loudhailer icon. It's where you can message every person in the community at once. The General area, indicated by a speech bubble, is like a normal WhatsApp group chat for your members.

Send an event invite

Now we'll explain how to create an event. Open Announcements then tap the paperclip (Android) or + (plus - iOS) icon and click the pink Event button.

Now give your event a name, a date and location. If the event is happening online, then add a WhatsApp Call link to the



Members will be alerted to the event in the group chat

event (1 in our screenshot above left). This lets members join in a video group call. If you would prefer to use another video service for the event, you can add that link in the Description 2. Note that the description is limited to 2,048 characters.

Now tap the green Send button at the bottom right and the event will be shared in the group chat (1 in our screenshot above). It's then up to members in your community to respond with Yes/No. They can also view event information from the group chat. You can amend or cancel the event at any time by tapping 'Edit event' 2. Members will be notified of any changes via the group chat in the General section.

You can also pin your event to the top of your WhatsApp community, so members are more likely to spot it. To do this, hold down the Event notification in the General section, then tap the pin icon at the top right. Now choose to pin the message for 24 hours, seven days or 30 days.

What's All the Fuss About...

Bluetooth 6.0

Its new tools sound confusing, but they'll connect your devices better

What is it?

The new version of the wireless communication technology, announced in early September by the Bluetooth Special Interest Group (SIG), whose mission is to create a "world without wires" (www.snipca.com/52000).

When will it be available?

Probably next year. The official release means manufacturers can now build it into their devices, but it'll take time for these to appear on the shelves. And to use Bluetooth 6.0, both the device sending the signal and the device receiving it need to be compatible with the new technology – for example, the laptop playing music and the earbuds you're listening to. It has plenty of exciting new features, not that you'd know it from their names. Take 'Channel sounding', for example.

What does that do then?

It's a new technique that improves the connection between devices by analysing the quality of the signal being transmitted. This means it can determine more accurately how long it takes signals to be sent between devices, which in turn means it can measure the distance between them with what SIG claims is "centimetre-level accuracy" over 150 metres. It means that trackers like Apple's AirTags, Samsung's SmartTags, or Tiles (pictured below) will be able to locate lost devices with more precision.

Do those trackers currently use Bluetooth 5.0?

Yes – or recent updates, such as the latest (5.4) released in March 2023. But AirTags also use Ultra-Wideband (UWB) technology, which is more precise and works over a longer distance. Bluetooth 6.0

Tile trackers will be able to use Bluetooth 6.0 to locate missing items more precisely



will bring these levels of accuracy to a greater range of devices.

But isn't it risky to have Bluetooth trackers connect over a long distance?

Undoubtedly. Stalkers can drop trackers into people's pockets and bags to monitor their movements. It also increases the danger of hackers intercepting signals because they've got a longer range to target. But SIG says Bluetooth 6.0 will have enhanced privacy features that will make it harder for attackers to hack signals or track devices without permission. It will also ensure that only authorised people will be able to use smart keys that unlock your car, house or hotel room

Can smart keys be hacked then?

Yes, especially if the Bluetooth used by the key isn't sufficiently encrypted. Hackers can capture the legitimate signal between key and lock and then 'replay' it to use later. Smart locks defend against this threat by generating unique, time-sensitive keys that expire after use. Without this key a replay attack can't work.

What else can Bluetooth 6.0 do?

Well, there's also 'Decision-Based Advertising Filtering', which sounds like you can use it to stop seeing certain adverts based on your preferences. But 'advertising' here refers to how Bluetooth devices like trackers, earbuds and phones broadcast their presence and capabilities to other devices nearby. Filtering this list more efficiently means devices can find what they need to connect to faster.

Another misleadingly named new feature, called 'Monitoring Advertisers', detects when devices are moving closer or further away. This saves power because your device doesn't need to keep looking for signals that are no longer nearby.

Do any of the new features have ordinary names?

Not really. Another example is 'ISOAL Enhancement', which stands for 'Isochronous Adaptation Layer' and means transmitting more data at the same time. This will reduce latency (ie, delays) in devices like headphones when listening to music, talking in a video call or playing games. It will also boost battery life because devices won't need to waste energy by constantly reconnecting.

So basically, Bluetooth 6.0 is faster, smoother and safer?

Yes. Sounds simple when you put it like that.

WINDOWS 10

is DOOMED!

With a year to go until Microsoft ends support for Windows 10, it's time to decide what to do with your PC.

Robert Irvine explains your seven options so you can choose which is best for you



WHAT YOU CAN DO

- Bypass Windows 11's system requirements
- Block Windows 11 upgrades until next October
- Save money on a new Windows 11 computer
- Transfer important files from your Windows 10 PC
- Ditch Windows for a different operating system
- Keep using Windows 10 safely after October 2025

On 14 October 2025, Microsoft will end support for Windows 10. This means the 10-year-old operating system will no longer receive security updates and bug fixes.

With Windows 11 freely available since October 2021, Microsoft presumably hoped most of us would have upgraded by now. But the latest figures suggest otherwise – according to Statcounter, around 64 per cent of PC users are still running Windows 10, while only half that number have moved to Windows 11 (www.snipca.com/51995).

There are several reasons why nearly two-thirds of us have stuck with Windows 10. For starters, it's an excellent, easy-to-use system that does everything we need, whereas

Windows 11 has made unpopular changes.

These range from the redesigned Start menu to the integration of AI tool Copilot and the forthcoming Recall feature, which has been dubbed a 'privacy nightmare' (www.snipca.com/51996). Additionally, many Windows 10 users have been unable to upgrade to Windows 11 because of Microsoft's strict system requirements.

With a year to go until Windows 10 becomes unsupported and unsafe, now is the perfect time to consider your options – there are actually more than you think. In this feature, we suggest seven things you can do before Microsoft pulls the plug on the decade-old operating system, to help you decide which is best for you.

OPTION 1: UPGRADE TO WINDOWS 11 NOW

As we explained in our ‘Question of the Fortnite’ in Issue 692 (page 10), the latest preview build of Windows 11 closes a loophole that lets you upgrade from Windows 10 on PCs without the TPM 2.0 security feature. Although that’s only one of the system requirements for installing the operating system, it suggests Microsoft is starting to clamp down on workarounds that let you run Windows 11 on what it deems to be unsupported hardware.

If your PC falls into that category, and you can’t afford a new one, this stresses the urgency of upgrading while it’s still possible. The trick for bypassing the TPM 2.0 check still works in Windows 11 24H2 – the next major system update, expected this month – and so do other workarounds, but it’s only a matter of time before Microsoft closes them all.

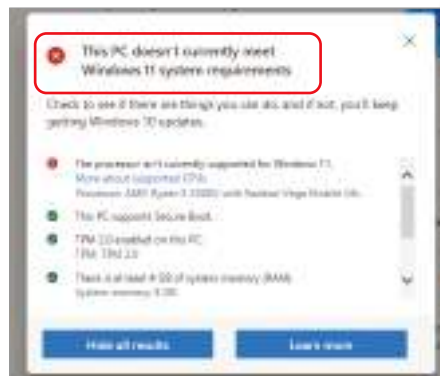
It’s first worth double-checking which system requirements your PC fails to meet. Download the PC Health Check app from www.snipca.com/51947 and click the ‘Check now’ button under ‘Introducing Windows 11’.

If the app says your PC “doesn’t currently meet Windows 11 system requirements” (see screenshot above right), click ‘See all results’ to find out why. It may be because TPM 2.0 isn’t enabled; **Secure Boot** isn’t supported; you don’t have a compatible processor; and/or your PC doesn’t have enough **RAM** or storage. The last two requirements are important for the smooth running of the operating system, but you can try to bypass the others.

Bypass Microsoft’s upgrade restrictions

To allow upgrades on an unsupported processor and/or TPM version, type **regedit** in the Windows search box and select ‘Run as administrator’ under Registry Editor. When the Registry Editor opens, navigate to the key: **HKEY_LOCAL_MACHINE\SYSTEM\Setup\MoSetup**. Right-click this key and choose New, then ‘DWORD (32-bit) Value’. Name the value **AllowUpgradesWithUnsupportedTPMOrCPU**, double-click it and enter **1** in the ‘Value data’ box. Press Enter to confirm, then close the Registry Editor and restart your PC.

Next, download and run the free tool Rufus (www.snipca.com/51948) and insert a USB stick in your PC – this should have at least 8GB of space. Ensure



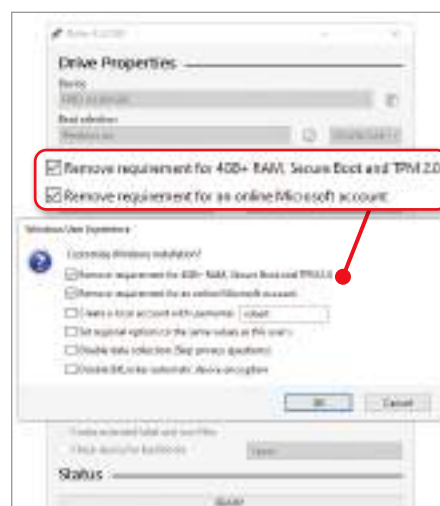
PC Health Check tells you whether your PC meets Windows 11 requirements

‘Disk or ISO image’ is selected in the ‘Boot selection’ menu, then click the arrow next to the Select button, choose Download and click that button.

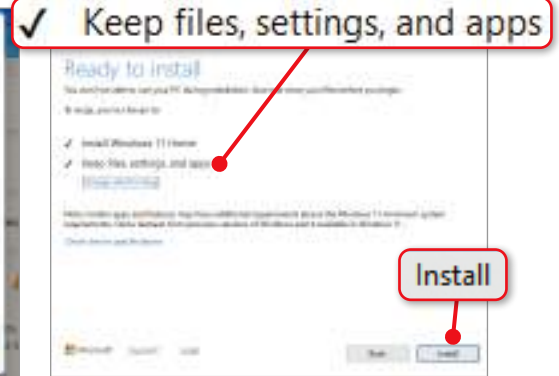
In the box that opens, select ‘Windows 11’ and the release, edition, language and architecture (processor type) suggested by Rufus. Click ‘Download’ to save the Windows 11 **ISO file** to your PC – it’s 6.3GB in size, so may take a while.

Once the ISO file has downloaded, click the ‘Image option’ menu in Rufus and select ‘Standard Windows installation’. Click ‘Start’ and when the Windows User Experience box opens, tick the boxes ‘Remove requirement for 4GB+ RAM, Secure Boot and TPM 2.0’ and ‘Remove requirement for an online Microsoft account’ (see screenshot below). Click ‘OK’ to write the Windows 11 ISO to your USB stick.

Once this is done, open your USB drive in File Explorer and double-click the ‘setup.exe’ file. This will begin the Windows 11 installation process – select the option to keep your files, settings



Rufus removes Windows 11’s RAM, Secure Boot and TPM requirements



You can choose to keep your files, settings and apps before you upgrade

and apps before you click Install (see screenshot above).

Download Windows 11 from Microsoft

If Rufus is unable to download the ISO file, you can get one from Microsoft’s ‘Download Windows 11’ page at www.snipca.com/51556. In the Download Windows 11 Disk Image (ISO) section, select ‘Windows 11 (multi-edition)’ in the dropdown menu then click Download. Once downloaded, click the Select button in Rufus to choose the ISO, then follow the steps in the previous section.

Alternatively, use the Media Creation Tool – which is available from the same page – to download a **bootable** version of Windows 11. You can either create this directly on a USB stick, or download an ISO file to burn later. If you choose the latter option, the file will be saved to your Documents (not your Downloads) folder – select it in Rufus to remove Microsoft’s requirements.

If you use the Media Creation Tool’s USB stick method, Windows may warn you that your PC “won’t be entitled to receive updates” when you select Upgrade. You can either click Accept to upgrade anyway, or cancel the upgrade and perform a **clean install** instead. This *will* receive updates, but it entails wiping all your files and settings, so ensure you back up everything important first.

To perform the clean install, open the Settings app, choose ‘Update & Security’ then Recovery, and click ‘Restart now’. When the Advanced Startup screen appears, click ‘Use a device’ and select your USB stick. This will boot you into the Windows 11 installation, where you can choose ‘Custom: Install Windows only’.

OPTION 2: UPGRADE TO WINDOWS 11 LATER

If your PC meets Windows 11's system requirements but you haven't yet upgraded, it's possible you've decided to stick with Windows 10 for as long as possible. Unless Microsoft changes its plans, that currently gives you another year to enjoy the operating system and receive technical support and security updates.

However, it also means 12 more months of upgrade nags, which are already becoming very annoying. Last year, some Windows 10 users started seeing full-screen reminders to upgrade to Windows 11, with buttons to either 'Get it' instantly or 'Schedule it' to install later. A tiny option to 'Keep Windows 10' was tucked away at the bottom of the screen (see screenshot below), but clicking this took you to two further screens encouraging you to upgrade, until you were finally able to choose 'Decline upgrade'.



Microsoft's full-screen nags try to trick you into upgrading to Windows 11

InControl blocks premature and accidental upgrades to Windows 11



Microsoft has since paused these full-screen nags, but they're certain to resume as Windows 10's doomsday draws nearer, and smaller pop-ups and prompts are continuing to appear. The danger is that you'll inadvertently agree to the upgrade and end up installing Windows 11 long before you want or need to do so.

The simplest way to avoid accidental upgrades is using the free tool InControl (www.snipca.com/51949). This keeps your Windows version at its current release, while allowing essential security updates, and blocks at least some of

Microsoft's upgrade prompts. It works by tweaking registry settings to disable updates, but is safer than changing them manually.

Download and run InControl, and it will show your version of Windows 10 in the bottom-left corner (1 in our screenshot above) – set this to 10/22H2, if it isn't already. Click the Take Control button 2 and the program will confirm that 'You are in control of OS upgrades on this system'. This prevents Microsoft from forcing or tricking you into upgrading to Windows 11 until you're ready – click Release Control when you are.

OPTION 3: BUY A NEW WINDOWS 11 PC

Rather than risk running Windows 11 on an unsupported or ageing PC, you may have to admit defeat and buy a new computer. This will at least ensure the operating system is as speedy, stable and secure as possible, and that it's using hardware that meets its demands.

A new Windows 11 machine needn't cost you a fortune: you can buy a minimum-specification laptop for as little as £200 and a desktop PC from around £300, from stores including Amazon, AO, Argos, Currys, Ebuyer and John Lewis.

For example, at the time of writing, Currys' best Windows 11 deal was an Asus Vivobook Go 15 for £209 (www.snipca.com/51953), offering 4GB RAM, 128GB storage and a quad-core Intel processor.

John Lewis was selling the HP S01-aF2004na desktop PC for just £280, including free delivery (www.snipca.com/51952, see screenshot). This runs



John Lewis was selling this HP-branded Windows 11 Home PC for just £280

Windows 11 Home and has a 2.2GHz Intel CPU, 8GB RAM and a 256GB SSD.

Use a price-comparison site such as PriceRunner (www.pricerunner.com) or PriceSpy (www.pricespy.co.uk) to find a model that best suits your own requirements in terms of memory, storage, processor, graphics and connections, as well as your budget.

If there are no good matches, consider ordering a custom-build from PCSpecialist (www.pcspecialist.co.uk) or Palicomp (www.palicomp.co.uk), which let you hand-pick your preferred components.

The cheapest laptops tend to be those running Windows 11 S, but think carefully about buying one of these. Although "streamlined for security and performance", this version of the operating system only allows you to install apps from the Microsoft Store and limits you to using Edge as your browser.

You can switch out of S Mode (but not back to it) by activating and upgrading to the full version of Windows 11 (see Reader Support on page 71). However, because these laptops usually have lower specifications, they may not run as smoothly when performing resource-intensive tasks such as gaming.

OPTION 4: BUY A REFURBISHED WINDOWS 11 PC

You can save money on a Windows 11 computer, especially if it's a reluctant purchase, by opting for a **refurbished** model. Because the operating system has been around for three years, lots of sites now sell refurbished Windows 11 laptops and desktop PCs that are in excellent condition. Unless you're desperate to have a new AI-enabled machine, you'll easily find an affordable model with the right specifications.

Back Market sells thousands of refurbished Windows computers (www.snipca.com/51957) and offers a wide range of filters to narrow them down. As well as sorting by price and brand, you can specify the processor type and speed, storage, memory, screen resolution and other criteria. To focus on Windows 11, tick the 'Release year' filters to show only models made after 2021. Delivery is free, with a 30-day returns policy and a one-year minimum warranty, though there's a small fee for 'quality assurance'.



Laptops Direct sells a wide range of refurbished Windows 11 computers in excellent condition

At Laptops Direct's Refurbished Store (www.snipca.com/51958) you'll find loads of big discounts on refurbished laptops, desktop PCs and all-in-one PCs from manufacturers including Acer, Dell, HP and Lenovo. We spotted several Windows 11 Pro models for under £300 graded as 'Excellent' condition, such as the Lenovo ThinkCentre M75s pictured above. The site offers free delivery to most of the UK, with warranties that vary from three months to 12 (you can

Dell's refurbished Windows 11 laptops – like this Dell Vostro 15 – are almost as good as new



pay extra to extend the period).

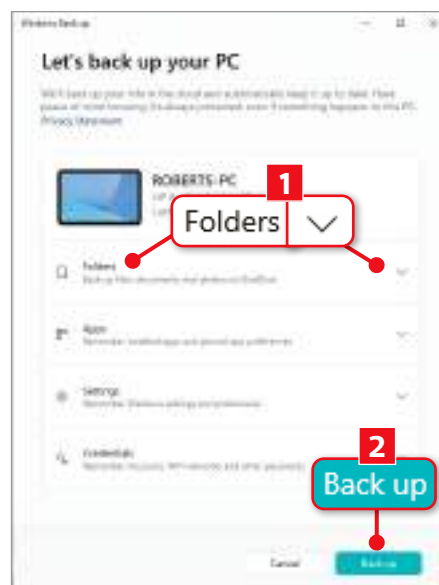
Dell Outlet (www.snipca.com/51982) is another great source of refurbished Windows 11 computers, with hundreds of models to choose from. Though its prices aren't as low as other sites we've mentioned, all desktop PCs and laptops have the same warranty and service as if you bought them new. The cheapest we found was the Dell Vostro 15 (3520), priced at £306, including free delivery (www.snipca.com/51959, pictured above). This runs Window 11 Pro and has 8GB RAM, a 256GB SSD and a six-core Intel processor.

Copy files from Windows 10 to Windows 11

One big hurdle when switching from an old Windows 10 PC to a new Windows 11 system is ensuring you don't lose years' worth of documents, photos and other important files. Backing up files to an external hard drive or USB stick is one option, but the simplest solution is to use the built-in Windows Backup tool.

This saves data – including files, details of Microsoft Store apps and settings – to OneDrive, so you can transfer them to your new computer through your Microsoft account. The main catch is that OneDrive only gives you 5GB of free online storage, so Windows Backup only backs up files in your Desktop, Documents and Pictures folders. If these exceed the 5GB limit, you'll need to either pay for more storage, or move/delete less important items from those folders. Equally, if important files *aren't* in those three folders, relocate them before backing up.

Launch the tool in Windows 10 by selecting 'Windows Back up' in the Start menu. Click the arrow next to Folders (1 in our screenshot above right) and choose the folders you want to back up from the three available. You can also back up a list of apps you've installed from the Microsoft Store, Windows settings (such as accessibility, personalisations



Windows Backup lets you transfer data to Windows 11 through OneDrive

and language preferences) and credentials – including your passwords and Wi-Fi details.

Click 'Back up' 2 to save the selected data to OneDrive – this will take a few minutes. If you don't have enough space in your OneDrive account, the tool will tell you the files have only been 'partially' backed up.

When you set up your new Windows 11 computer and sign into your Microsoft



Restore your backed-up files when you set up Windows 11

account, a message will inform you that backups were saved from your previous PC. Click 'More options', select the backup and choose 'Restore from this PC' (see screenshot above). Your Windows 10 data will now be transferred to Windows 11. The backed-up files should appear in the relevant folders in File Explorer and the backed-up apps will be in your Start menu – click Reinstall if required.

READER OFFER!

ADD A
DISC FOR
£5.95



Upgrade to **Windows 11 Pro** for just **£49.99!**

Your PC almost certainly came with Windows 11 Home. But did you know it's easy to upgrade to **Windows 11 Pro** to get advanced features like BitLocker drive encryption?

There's no need to install a new version of Windows – just take your new Professional key, go to System, Activate, then select 'Change Product Key'.

To upgrade, visit www.snipca.com/50563 and click the red **Buy Now** button on the right.



JUST SO YOU KNOW...

This offer can be used by one person only, and expires at midnight on **8 October, 2024**.
It's a lifetime licence for one computer.

OPTION 5: DITCH WINDOWS FOR CHROMEOS FLEX

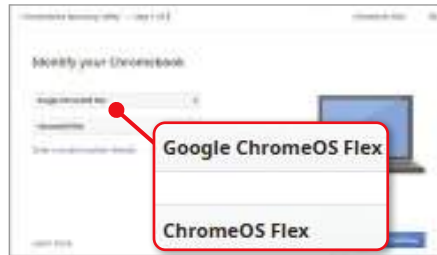
If you're unable or unwilling to upgrade to Windows 11, you can extend your PC's life by switching to a different operating system. Though this won't be an exact substitute for Windows 10, it will at least give you the security and stability Microsoft will deny you from next October – and save you paying for a new device.

The best alternative is ChromeOS Flex (www.snipca.com/51963), because it's free, lightweight, fast and very easy to use. If you're familiar with Google Chrome, you've basically mastered it already because its minimalist interface consists of that browser above an empty desktop and taskbar. It's almost the same operating system used by Chromebooks, minus certain hardware features and support for Android apps.

ChromeOS Flex runs on virtually any computer with 4GB of RAM, 16GB of storage and a 64bit processor – see the list of certified devices at www.snipca.com/51969 – and boots from a USB stick (minimum 8GB capacity). Before you install the operating system over Windows 10, you can try it first to decide whether it's right for you.

How to try ChromeOS Flex

Visit the Chrome Web Store and install the extension Chromebook Recovery



Use Chrome Recovery Utility to create a bootable version of ChromeOS Flex

Utility (www.snipca.com/51965). Pin this to Chrome's toolbar, click its button and choose 'Get started'. When prompted to identify your Chromebook, click 'Select a model in the list' and set Google ChromeOS Flex as the manufacturer and ChromeOS Flex as the model (see screenshot above).

Insert your USB stick, click Continue and select the name of the device. Click 'Create' to reformat the USB stick and create the ChromeOS Flex 'recovery media' – this may take up to 20 minutes. Click 'Yes' to allow the app to make changes to your device, then click OK once the process is complete.

Next, you'll need to boot the new operating system from the USB stick. Restart your PC to the Advanced Startup screen (see page 51), click 'Use a device' and select 'USB Drive (UEFI)'.

ChromeOS Flex will now launch – click



ChromeOS Flex has a minimalist interface with a menu button in the bottom-left

'Get started' then 'Try it first'. When you're ready to replace Windows 10, go back to this screen and choose 'Install ChromeOS Flex'. Connect to your Wi-Fi network, select 'For personal use' and sign into your Google account to start using the new operating system. Alternatively, click 'Browse as guest' in the bottom-left corner of the screen to explore without signing in.

ChromeOS Flex is updated automatically to protect you against security threats, and as you'd expect, is seamlessly integrated with Google services such as Gmail, Drive/Docs and YouTube.

Click the circle button in the bottom-left corner (see screenshot above) to access and search your files, apps and settings. You won't be able to install Windows software, but you can replicate some tools using Chrome extensions and PWAs.

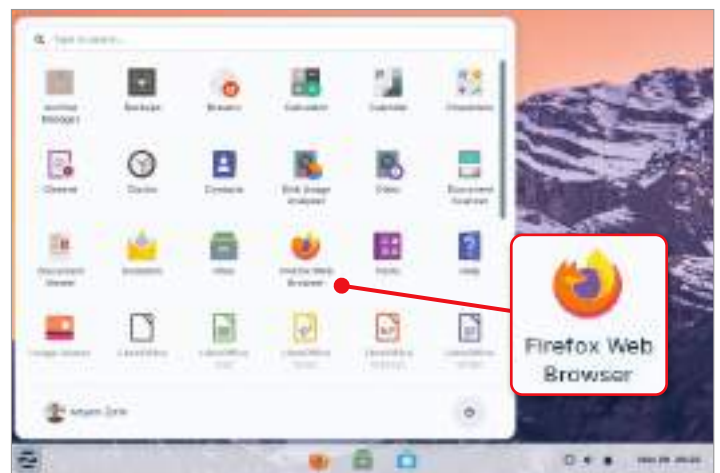
OPTION 6: SWITCH FROM WINDOWS TO LINUX

If you've never been tempted to run Linux on your PC, or tried it once and didn't like it, then even the demise of Windows 10 may not change your mind. Linux is commonly regarded as being too complicated for the average home user, because of its Terminal command-line operation and unintuitive interface.

While that's certainly true of some Linux **distros** (distributions), other versions are targeted at new Linux – and former Windows – users. Our favourite is the free Zorin OS (www.snipca.com/51970), which has a familiar Windows-style Start menu and taskbar, and has been designed to "work on computers as old as 15 years".

Zorin OS includes Firefox for web browsing (see screenshot) and LibreOffice for working with Microsoft Office/Microsoft 365 files, and lets you install Windows software through its Windows App Support feature (www.snipca.com/51972).

Zorin OS is a friendly version of Linux that's ideal for former Windows users



You can customise its interface to make it more Windows-like, though some layouts – including 'Windows Classic-like' – are only available in its Pro version, which costs £48 (www.snipca.com/51973).

Most Linux distros can be booted from

a USB stick, so you can test-drive them before you install them on your PC. Just download the ISO file and use Rufus (see page 51) to burn it to the USB drive to create a bootable version of the distro. Choose the 'Try' rather than 'Install' option when you boot from the stick.

OPTION 7: KEEP USING WINDOWS 10 SAFELY

If none of the previous six options appeal to you, because nothing beats Windows 10 and you don't want to move on, the good news is that you can keep using it safely after 14 October 2025. There are a few workarounds that extend the operating system's life, and though each suggestion contains a caveat at least one of them may be preferable to upgrading to Windows 11. Here's what you can do.

Pay Microsoft for security updates

Last December, Microsoft announced that it will be launching an Extended Security Updates (ESU) program for Windows 10 when the operating system reaches end of support in October 2025. This means Microsoft will continue to provide security updates for three years beyond the cut-off date.

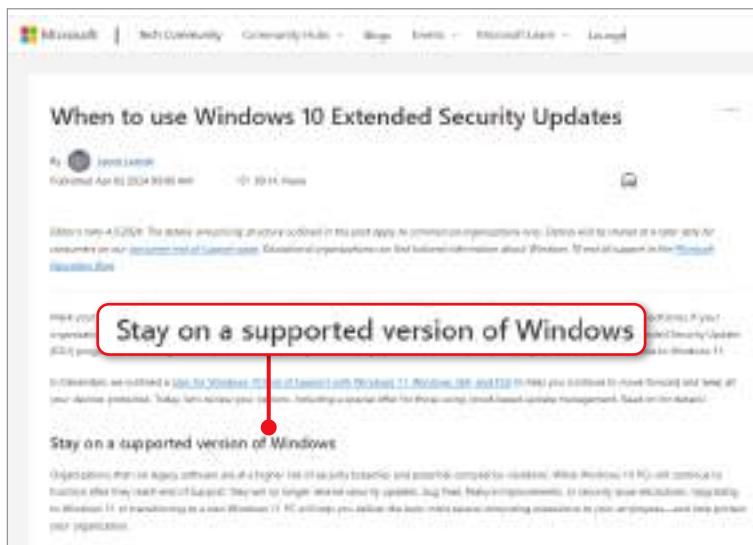
Previously, the ESU program was limited to Microsoft's business customers, but the company has now opened it to everyone. This throws a welcome lifeline to Windows 10 users, but with one major (if inevitable) catch: you'll need to pay for it.

Microsoft has yet to reveal how much it will charge users for extended Windows 10 updates on their personal computers, but businesses will have to pay \$61 (£46) per PC for the first year. This doubles to \$122 for the second year and again in year three to \$244, so the whole ESU period will cost \$427 (£324). For that price, you could buy a new Windows 11 PC (see page 52), though as ESU involves an annual subscription you don't need to pay for the full three years.

The cost to consumers is likely to be lower, but bear in mind that the ESU program only provides "critical and important security updates". You won't receive feature updates, because Windows 10 won't be getting any more, or any, non-security related bug fixes or technical support. However, at least you'll be safe from malware and hackers, and can keep using your favourite operating system for another three years.

We don't yet know how home users will be able to sign up for ESU, but businesses will have three options. They can download an activation key, use a 'cloud-based' activation method or get an ESU licence at no extra cost through their Windows 365 subscription (an online version of Windows only available to Enterprise customers).

See www.snipca.com/51980 (pictured



Microsoft's Extended Security Updates throw a lifeline to Windows 10 users

above) for more information.

Pay less for security updates with Opatch

As we reported in Issue 688 (page 6), Slovenian software company Opatch (www.snipca.com/51999) will offer extended security updates for Windows 10 for at least five years after support ends. That's two years more than Microsoft's ESU program and Opatch says it will be for "even longer if there's demand" (www.snipca.com/51983).

These updates will be available to individuals and small businesses who sign up for annual subscriptions priced at €24.95, which works out at £25.21 once VAT is added. That's just over half of what Microsoft is charging businesses, and likely to be much cheaper than what consumers will pay too. Also, the price won't double every year – Opatch says that though prices may "be adjusted in future", active subscriptions will keep the same price for two years.

With an Opatch subscription, you'll receive "micropatches" for security vulnerabilities that are likely to be exploited by hackers after 14 October 2025. These small patches will be applied to running processes in your PC's memory without modifying any Microsoft files. You won't need to reboot your computer, and probably "won't even notice" a patch has been installed.

Opatch will also fix flaws in non-Microsoft software, as it has previously done for programs including 7-Zip, Adobe Reader, Dropbox, WinRAR and Zoom.

To get security patches from Opatch, until October 2030 and potentially



Opatch will let you keep running Windows 10 safely until at least October 2030

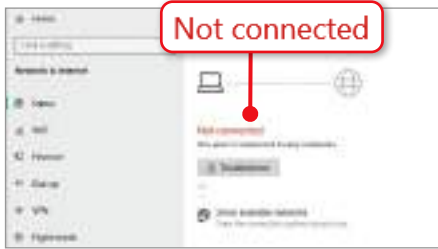
beyond, you need to sign up for a free account (see screenshot above) and download its Opatch Agent tool. When the Windows 10 deadline is imminent, purchase an Opatch licence, install your last official Windows updates and let Opatch handle the patching from that point on.

The company has been around since 2016 and still issues security patches for Windows 7, Microsoft Office and older versions of Windows 10, so it won't disappear overnight. Until other alternatives emerge, Opatch is the safest, cheapest and most reliable way to prolong the operating system's life.

Disconnect Windows 10 from the internet

One way to minimise the security risks to Windows 10 after the cut-off point is to only use your PC offline. This will stop malware being downloaded from the web, prevent hackers from infiltrating your system and keep your data firmly stored on your hard drive so it can't be stolen in the background.

In practice, however, this option is



Using Windows 10 offline keeps you safe, but will also prove frustratingly limited

likely to be unworkable, with the drawbacks far outweighing the safety benefits. Once you've disconnected your computer from Wi-Fi (see screenshot above), unplugged the Ethernet cable and disabled Bluetooth, your activities will be extremely limited.

Losing the internet will mean no email, web browsing, streaming, downloading or access to any online tools, and you won't be able to update your software and drivers. This obviously won't be a problem when you want to work peacefully offline – for example when writing documents, editing photos or playing music and videos saved on your hard drive. But you won't be able to share files without copying them to a USB stick, which could itself spread malware to your unpatched PC.

Ultimately, the offline option is feasible for a secondary Windows 10 PC you use occasionally, but will prove frustrating on your main machine.

Run Windows 10 in a virtual machine

Another way to keep using Windows 10 after next October, without paying for updates, is to install it in a **virtual machine**. This will run the operating system in a window inside Windows 11, and let you access your favourite Windows 10 tools and programs.

To try this option, you'll need virtualisation software, such as the free VirtualBox (www.virtualbox.org), and a Windows 10 ISO. You can get the latter from Microsoft at www.snipca.com/51989 using the Media Creation Tool – choose the DVD option to save the ISO

Should you keep using Windows 10 without updates?

Taking no action before or after 14 October 2025 may seem foolish or reckless, yet it's an option millions of people will choose. Even Microsoft says that: "You may continue to use Windows 10 after support ends" (www.snipca.com/51985) – your PC won't suddenly stop working, it just won't receive security updates.

However, though it's unlikely your computer will be flooded by malicious attacks the day after Microsoft pulls the plug, it will be only a matter of time before new Windows 10 vulnerabilities are discovered. Don't assume your antivirus software will keep you completely safe, because it won't plug holes in the operating system itself. Only security patches from Microsoft (or Opatch, see opposite) can fix these flaws, and the longer they're unpatched the more time hackers have to exploit them and infect your PC.

Additionally, Microsoft is unlikely to have identified and patched every



Windows security hole allows attackers to install malware via Wi-Fi — new patch plugs gaping vulnerability

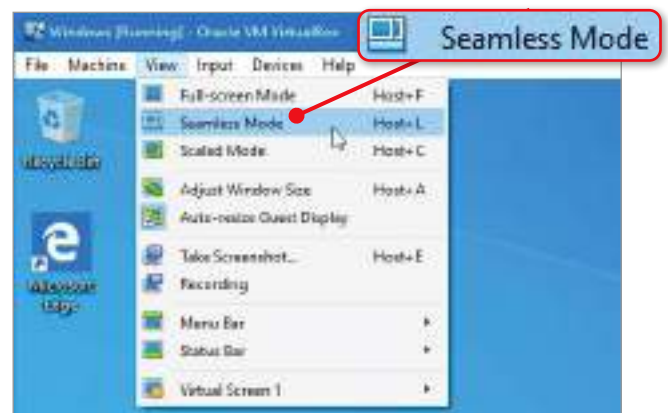
vulnerability in Windows 10 by the time it stops updates. New security holes are still being discovered in the OS – in June, for example, Microsoft fixed a critical flaw in the Windows Wi-Fi driver that would have allowed attackers to run malicious code (www.snipca.com/51986, see screenshot).

It may save you hassle and money to keep using Windows 10 without updates, but the consequences could be grave. Although it's possible Microsoft may patch serious Windows 10 problems beyond October 2025, it's not worth risking your data to find out.

file to your PC.

You'll also need a valid Windows **product key** – this may be on a sticker attached to your Windows 10 computer. If not, type **cmd** in the search box, open Command Prompt and enter the following command: **wmic path softwareLicensingService get OA3xOriginalProductKey** – you can copy this from our Pastebin account at www.snipca.com/51990.

VirtualBox has a Seamless Mode that lets you use programs installed on your virtual PC as if they were on your main computer. Press the right-hand Ctrl button and L, or click the View menu and choose Seamless Mode (see screenshot above).



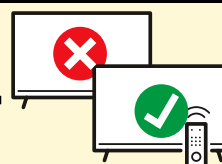
VirtualBox lets you run a virtual version of Windows 10 in Windows 11 using Seamless Mode

One problem with running Windows 10 in virtualisation software is that it consumes a lot of memory, so make sure your PC has enough RAM to serve both your main operating system and the virtual one. **ca**

NEXT ISSUE On sale Wednesday 9 October

DON'T BUY THE WRONG SMART TV

The choice is bewildering – so let us explain which is best for you



PLUS

- Stop your phone listening to you We always turn off these settings
- Do you need a new AI PC? We'll explain how to check

Subscribe to Computeractive at www.getcomputeractive.co.uk

ONSALE
Weds
9
Oct

SAVE 35%

SUBSCRIBE TODAY



ORDER SECURELY ONLINE

 magazinesdirect.com/CAC/D35T

 **0330 333 1113**

QUOTE OFFER CODE: D35T

Please allow 28 days for delivery, UK only. Future Publishing Limited reserves the right to limit offers of this kind to one per household.



SCAN ME



Other great reasons to subscribe...

- Get all the tips, product reviews and security updates early
- Never miss an issue and get the handiest technology magazine delivered straight to your door every 2 weeks.

PRINT EDITION

NEW
Digital
access**



£25.26

every 6 months

6 months of
ComputerActive in print,
saving 35%*

DIGITAL EDITION



£20.21

every 6 months

6 months of
ComputerActive digitally,
saving 35%*

Offer closes 22 October 2024. Price is guaranteed for the first 6 months, please allow up to 6 weeks for the delivery of your first subscription issue (up to 8 weeks overseas) the full subscription rate is for 6 months and includes postage and packaging. *Savings are based on the cover price. Payment is non-refundable after the 14-day cancellation period. **Access to the digital library will end with your subscription. For full terms and conditions, visit www.magazinesdirect.com/terms. For enquiries and overseas rates please call: +44 (0) 330 333 1113. Lines are open Monday-Friday 8.30am-7pm, Saturday 10am-3pm UK Time (excluding Bank Holidays) or email: help@magazinesdirect.com. Calls to 0330 numbers will be charged at no more than a national landline call, and may be included in your phone provider's call bundle.

Protect your home with a Smart lock

Looking for a convenient, secure way to protect your home? Jonathan Parkyn reveals everything you need to know about smart door locks – and why burglars hate them



High-tech, super-secure ‘smart’ locks have been the preserve of spy thrillers for years, but now they’re available in reality – and at prices that will allow you to install one on your own front door. These wireless digital devices offer keyless methods of gaining access to your home, such as a key code, **NFC** fob, fingerprint reader or a swipe of your smartphone screen. It makes unlocking your door much easier for you, while also making it harder for intruders to break in.

You can also lock or unlock your front door remotely, and give people access while you’re out – such as trusted tradespeople or family members.

Wireless devices can be hacked, of course, but the best smart locks are protected by bank-grade encryption and are constantly kept up to date. Indeed, Nottingham-based Ultion (www.snipca.com/52047) is so confident in its security that it offers a £5,000 guarantee to users of its Nuki locks (www.snipca.com/52053). Just

make sure you buy from a trusted brand, such as those we recommend.

Each of these is officially supported for use in the UK, unlike some you might find online. For example, August smart locks are often highly rated in reviews, but they’re intended for use only in the US and Canada.

Get the right lock for your budget

Various factors will govern your choice of smart lock, including the features you need, the type of smart lock you want and the type of locks you already have. But we’ll start with cost.

The good news is that prices start at just £100 for a basic model such as the **Yale Keyless Connected** (www.snipca.com/52052, pictured below left). This has a touchscreen keypad and provides entry by PIN, key card or fob. Advanced features are often absent from budget locks, however. For example, you can’t unlock the cheapest Yale Keyless Connected models using your smartphone, or remotely over the internet, without buying additional hardware (as we’ll explain), so depending on your needs you may have to increase your budget.

Check it works with your front door

It’s essential that your smart lock is compatible with your front door. The Yale Keyless Connected mentioned above is designed specifically for doors that have



Ultion's Nuki locks work with doors that have Euro cylinder-type locking systems

an existing Yale lock (or equivalent compatible night latch), for instance.

Ultion, meanwhile, produces a range of **Nuki** smart locks (starting at £169 from www.snipca.com/52029, pictured above), which are designed for use with doors that have Euro cylinder-type locking systems. If your door has a rotating doorknob on the inside, you’ll need to specify your current lock’s manufacturer when buying your Nuki device to make sure you get the correct fittings.

Doors with multi-point locks – usually UPVC doors that require you to lift the handle to lock – require a different type of smart lock, such as the **Yale Conexis L2** (from £290 at www.snipca.com/52030).

The **SwitchBot Lock**, meanwhile, costs £130 for the base model (www.snipca.com/52032), and has the added convenience of working with many types of door without the need for any drilling or screwing.



Yale's £100 Keyless Connected provides entry by PIN, key card or fob

If you're not sure of a particular lock's compatibility, check the manufacturer's website. Most brands offer a handy compatibility checker or the option to chat with a specialist.

Connect to your existing smart devices

If you already use other smart-home products, such as security cameras, doorbells and lightbulbs, opt for a smart lock that works with them. Most smart locks come with their own apps for setting up, controlling the device and so on. But if all your smart devices are compatible with the same smart home platform (Amazon Alexa, Apple HomeKit or Google Home), then they'll work together better. This will make it easier to set up automated routines and control your devices using your voice.

Some smart locks, such as those in Ultion's Nuki range, support Amazon, Apple and Google, but Yale's smart locks support only Amazon and Google. Check before you buy.

Control smart locks wherever you are

We'd argue that remote access – the ability to lock and unlock your front door from afar using your smartphone – is one of the most compelling reasons to buy a smart lock. This can be a lifesaver if, for example, you think you might have left the door unlocked when you left the house, or you need to give someone access to your home while you're away. Likewise, the ability to receive live notifications from your smart lock – such as an alert when someone tries to access your home without permission – makes smart locks a very attractive option.

The problem is that these features aren't always provided by default – and



Yale's Access Module (yellow) and Connect WiFi Bridge let you unlock your door remotely

adding them can drive up the cost. Nuki, for example, offers remote access as standard with its more expensive **Nuki Smart Lock Pro** (from £255, www.snipca.com/52034), but you'll need to make a one-off £45 in-app purchase to unlock remote access for the cheaper model.

What's more, to use Nuki's remote access, you need a smart-home hub that supports Thread and Matter (wireless protocols that make communication between smart-home devices easier and more secure). The **Google Nest Hub (2nd Gen)** (£90 from www.snipca.com/52035) and **Amazon Echo (4th Gen)** (£110 from www.snipca.com/52036) are two examples. If you already own a hub or smart speaker, check whether it supports Matter and Thread before you buy.

Some smart locks provide remote access and notifications through your home Wi-Fi network, but they may not be equipped to do this by default. To access the Yale Keyless Connected remotely, for example, you need to buy it as part of a bundle that includes the **Yale Access Module and Connect WiFi Bridge** (£180 from www.snipca.com/52037, pictured above). Similarly, the SwitchBot Lock requires a **SwitchBot**



Igloohome's Smart Deadbolt can be unlocked with a PIN, Bluetooth and a physical key

Hub Mini (£35 from www.snipca.com/52038) for remote access.

Add extra features

There may be other considerations to make when buying a smart lock, such as how it looks and what extra features are on offer. For example, you might want the option to open your door using your fingerprint – the **Wireless Fingerprint Keypad** for Nuki costs £145 (www.snipca.com/52039).

Auto-unlocking is another attractive proposition – very useful if you come home with armfuls of shopping and don't have a hand free to hunt for your fob or phone. You can configure Nuki and Yale devices to lock and unlock your door automatically using a combination of Bluetooth, GPS and **geofencing** technology. If you opt for a SwitchBot device, you'll need to buy the more expensive **Lock Pro** model (£140 from www.snipca.com/52040) for this feature.

Do you need a smart lock for a deadbolt? If so, you may need a dedicated deadbolt replacement, such as the **Igloohome Smart Deadbolt** (£145 from www.snipca.com/52041, pictured above), which you can unlock using a PIN, Bluetooth and a physical key.

Do smart locks work during power cuts?

The best smart locks – including all those we've mentioned in this article – are battery powered, so you'll still be able to lock and unlock your door during a power outage. You'll also receive notifications when the battery starts to get low, so you can make sure it's always charged.

Your smart lock should also provide an alternative way to gain access in case the battery runs out while you're away from home. With SwitchBot's locks, for example, you can use your original door

keys, while Nuki models come with their own keys for use as a backup. Yale's Keyless Connected devices can receive an emergency power boost through a standard 9V battery connection on the bottom edge of the device.

Even losing Wi-Fi won't stop you unlocking your door, because smart locks use Bluetooth or NFC instead. However, some functions, such as remote access and notifications, may be unavailable until your Wi-Fi connection is restored.

Are smart locks easy to install?

Some devices are easier to fit than others. The SwitchBot Lock, for example, benefits from a simple tool-free installation, while some models – including the Yale Conexis L2 – require you to replace your existing door handle and locking mechanism. Additional accessories, such as keypads, fingerprint sensors and Wi-Fi bridges, all add to the complexity of your initial setup. When you buy a smart lock, you can usually pay extra for expert installation. For example, Yale's smart door lock installation service costs £150. **ca**

Record and save TV shows

Recording TV programmes has many advantages over watching catch-up services, but your options are shrinking. **Robert Irvine** explains what you can still do to save shows to play later

Back in the 1980s, video-cassette recorders (VCRs) revolutionised the way we watched TV, allowing us to tape shows to play later rather than having to catch them when they were broadcast. VHS and Betamax were then superseded by recordable DVDs and personal video recorders (PVRs).

Sadly, since our viewing habits moved to streaming, our options for recording TV programmes are gradually disappearing. Here, we explain what's changed and what you can do to carry on recording.

What's happened to TV recordings?

As we reported in Issue 692 (page 6), BT/EE customers can no longer record BBC shows on their TV boxes via the internet. When you record a programme to your EE TV (formerly BT TV) Pro Box using Internet Mode, pressing play will now take you to the iPlayer app to watch it, where you'll be subject to that service's restrictions (more on that later).



Freely lets you watch live and on-demand TV – but you can't record it

Although you can still record shows using Aerial Mode, this requires your TV box to be connected to an aerial socket, and for your reception to be of sufficient quality.

This appears to be another move towards the eradication of TV recording. The latest set-top boxes, including the Sky Stream and Virgin Media Stream, as well as the just-released Google TV Streamer, don't let you record live TV to their built-in storage.

Although PVRs are still available, including Freesat and Freeview Play models, most haven't been updated for years, and newer devices have become harder to find. Now that all the main UK broadcasters have their own catch-up services, the manufacturers of TV hardware seem to assume that viewers no longer need to record what they can stream.

That's certainly the case with Freely (www.freely.co.uk, pictured below left), the free-to-view TV platform that launched in April. This lets you watch live channels and on-demand content over the internet on Freely-compatible TVs, without needing an aerial or satellite dish. Crucially, however, it lacks any option to record shows – not even to the 'cloud' or a connected device – so you're limited to what's available to stream in broadcasters' libraries. Although you can plug in an aerial to watch Freeview programmes, too, you won't be able to record those either.

Why recording is preferable to streaming

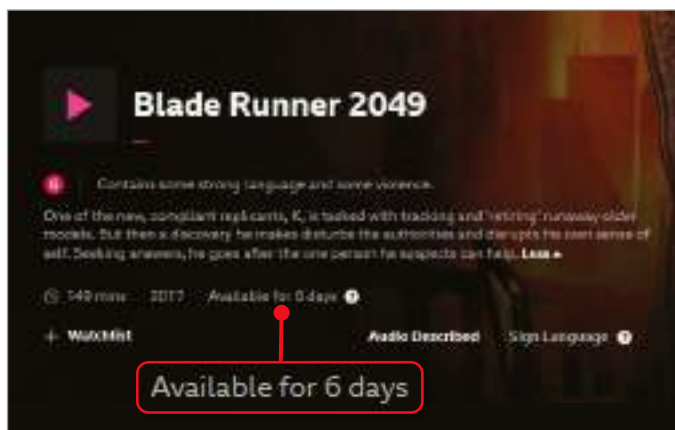
The main benefit of catch-up services is that you don't need to remember to record a TV show, but can watch it shortly after – and sometimes before – it's broadcast on the relevant channel. They also have plenty of content to browse and play on-demand, so you can discover interesting programmes you missed at the time.

The downside is that your viewing activities are at the mercy of the service. Shows are only made available for a limited time period – typically for 30 days after broadcast, though occasionally much shorter (see screenshot above right) – and whole series or specific episodes can be removed without warning.

Many films and sporting events never appear on catch-up services, because the broadcaster doesn't have legal rights to show them online. In contrast, programmes, films and football matches you record yourself can be watched whenever you want for as long as you want – with no risk of them 'expiring'.

Another big advantage to recording TV is that you can skip the adverts. If you watch ITVX or Channel 4's streaming service, you'll know how long, repetitive and annoying the ad breaks can be – unless you pay for a monthly subscription, which removes them.

Finally, catch-up services require a reliable internet connection – without one, you won't be able to watch anything.



Some content on catch-up services is only available for a short time



Sky Q lets you record hundred of hours of TV to watch when you want

That's why the 'cloud-based' recording offered by the Playlist feature on Sky Stream and Sky Glass devices is no substitute for a hard drive that stores and plays shows offline.

HOW YOU CAN KEEP RECORDING TV SHOWS

Get a TV recorder from your ISP

Despite the move towards smaller streaming devices and cloud-based storage, many internet providers still offer set-top boxes with recording capabilities. Though these may eventually be phased out, it's worth checking if you can get one from your current ISP, or – if you're out of contract – switching to a broadband-and-TV package that includes one.

For example, Sky Q (www.snipca.com/52003, pictured top right) has a box with a 1TB or 2TB hard drive that lets you record several channels simultaneously (the number depends on the model), and fast-forward the ads on playback. It costs £31 a month, plus a £49 setup fee, but –

unlike Sky's new Stream and Glass devices, which stream content over the internet – Sky Q requires a satellite dish.

Similarly, although Virgin Media's new Stream device has no recording features, its standard set-top box remains the Virgin TV 360 (www.snipca.com/52006). This can record up to six shows at once to its 1TB hard drive, and stores up to 100 hours of video in HD quality (500 hours in SD). It comes with all Virgin TV bundles, which cost from £33 a month.

As we explained opposite, BT/EE's TV Box Pro is now limited by its inability to record BBC shows in Internet Mode. It also stops you skipping ITV ads and no longer has U (formerly UK TV) channels. If those things don't bother you, EE is currently offering TV-and-broadband bundles for £5 a month for the first three months (www.snipca.com/52008), rising to £43 after that.

Record TV using your own PVR

Rather than commit to an expensive

subscription and lengthy contract with an ISP, you can buy your own PVR to record all the TV you want. The best new device – in fact, the only notable one to be launched this year – is the Manhattan T4-R (www.snipca.com/52009, pictured below).



The Manhattan T4-R is the best new device for recording TV shows

Manhattan boasts that the T4-R was "designed in Britain for great British telly lovers" and it combines live, on-demand and recorded TV in one simple interface. To watch and record Freeview channels, you simply need to plug in an aerial, but to stream catch-up services and install updates, the T4-R must be connected to the internet via Wi-Fi or Ethernet.

Its cheapest model offers 500GB of storage – enough for 300 hours of SD programming, or 150 hours HD – for £170, while the most expensive has a 2TB hard drive (up to 1,200 hours) for £230. You can record two different channels while watching a third, and pause and rewind live TV for up to two hours. The T4-R also lets you fast-forward adverts on Freeview recordings, and easily access recently (and accidentally) deleted content.

If you watch free TV on Freesat rather than Freeview, we recommend the official Freesat Recordable 4K TV Box (www.snipca.com/52011). Prices start at £229 for a 500GB hard drive, with the ability to record up to four shows at once. **ca**

Record TV shows to a USB stick

You may not need to buy a PVR, if your TV has a built-in recording function – as most smart TVs now do. Just plug a USB stick or external hard drive into your set to record live TV and play it back later.

The option uses your TV's Freeview or Freesat tuner, which means you can record any shows broadcast for free on those platforms, but not content from streaming services. If the set only has one tuner, you'll be limited to recording the current channel, but if it has two you can watch one show while recording another.



The process of configuring your USB drive for recording depends on your TV model, so check the manual or the support section of the manufacturer's website. You can usually start recording by pressing the Record button on the remote, or by selecting that option on-screen. For example, on recent Samsung TVs, press the 123 button (pictured), then Record.

You may also be able to schedule recordings via your TV's electronic programme guide (EPG). Press the Guide button on the remote, find and select the show you want to save, then choose Record.

Problems Solved

Our experts solve all your tech problems

PROBLEM OF THE FORTNIGHT

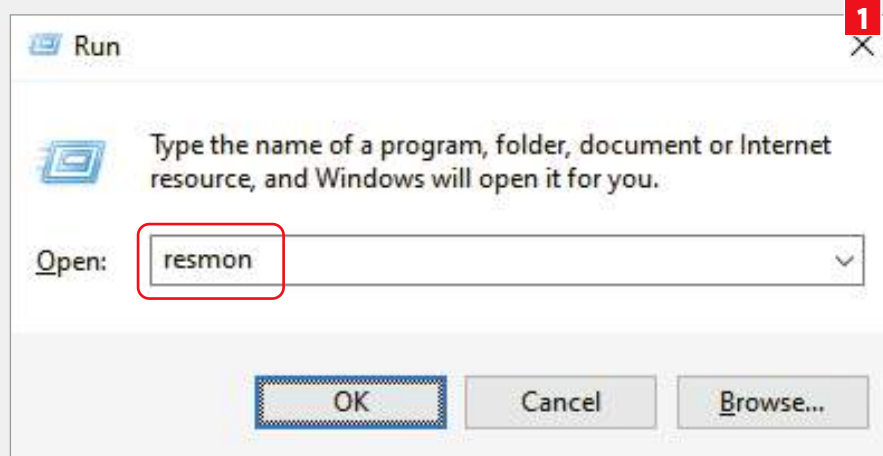
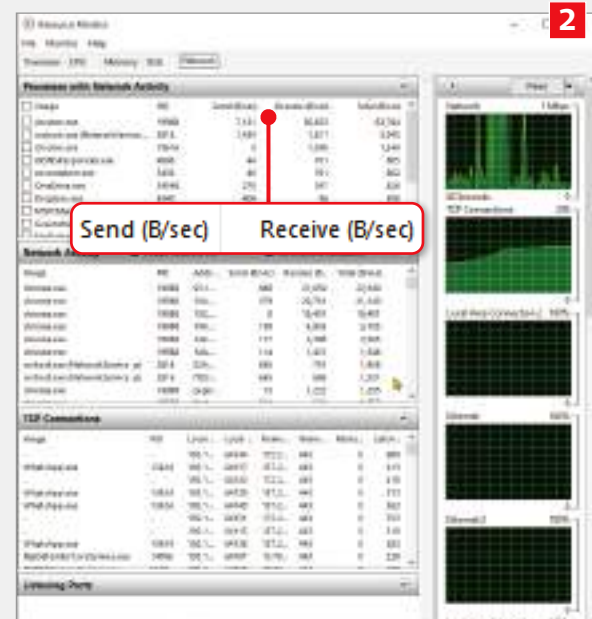
How do I monitor my network traffic?

Q My home network sometimes slows to a crawl for no apparent reason, no matter what I'm doing – be it moving files around or downloading *from* or uploading *to* the internet. I'd like to investigate why this is happening by monitoring network traffic – internal and external – and by also monitoring which programs and apps are using **bandwidth** (as I suppose something might be causing a bottleneck).

Is there an easy solution to doing this or would it require a multi-faceted approach?

Alan Jeans

A That depends on how technically minded you are, and how thorough you want to be. With enough know-how and patience you could theoretically identify and follow every last bit that passes in, across and out of your network. But, as well as being mind-numbingly dull, drilling down to this fundamental level requires advanced knowledge and confidence (not to mention a lot of free time).



Type **resmon** in the Run box to bring up information about your home network in several graphs and tables

However, there are easier ways to see what's happening, where and when, and thus what might be causing these delays. For example, your router might have some sort of built-in tool to do this. Without knowing the make or model, it's impossible to say what those might be or where to find them, but your starting point is at the router's admin page. You can access this in a web browser, typically by typing **192.168.0.1** or **192.168.1.1** and then entering the

username and password.

Look for options for networking monitoring or analysis, and then click to see what's on offer. You might be able to filter traffic by connected devices, say, or the types of activities carried out by those devices.

Alternatively, or as well, you can use software to interrogate what devices might be up to. Windows

Sort your columns by 'Send (B/sec)' or 'Receive (B/sec)' to see which apps and processes are sending/receiving most data at that moment

does have some built-in network-monitoring tools, which are fairly good. First, press Windows key+R to bring up the Run box, then type **resmon** (see screenshot 1) and press Enter. Now click to select the Network tab. Here, you'll see lots of information in tables and charts.

For your purposes, the tables are likely to be the most useful – and specifically the 'Processes with Network Activity' and Network Activity tabs. The first shows what's using network data at the process level, which is useful for measuring the network activities of specific apps. Click the table headings to sort the data. Sorting by 'Send (B/sec)' or 'Receive (B/sec)' (see screenshot 2), for example, will allow you to focus on which apps or processes are sending or receiving a lot of data at that moment.

Next, check the Network Activity tab to see what a particular app or process is communicating with, which could be a remote service based on **IP address** or something local.

Some of the information you'll find here can be quite niche, and you may need to search online to figure some of it out – but this is a primer on how to find what's causing your problem.

Why does Microsoft Money Plus take up so much storage?

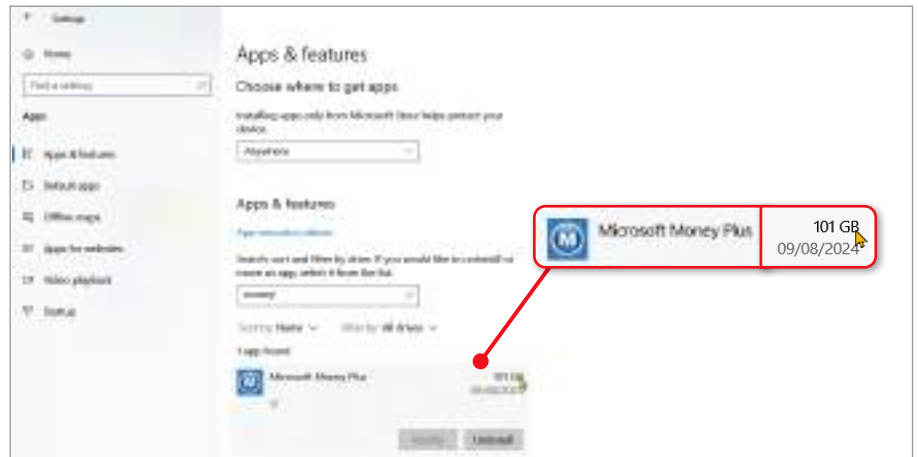
Q My Surface Pro 7 laptop-tablet is short of storage. Perusing my installed apps I was amazed to see that Microsoft Money Plus was taking up 100GB. I have the same program installed on my desktop PC, which has plenty of storage, and this showed it as being the same size. I use this program frequently for my finances so I'm reluctant to uninstall it.

Is this a case of false drive-space reporting? I did uninstall the program on my desktop PC and it didn't seem to make much of a difference. I'd be grateful for your thoughts and possibly a solution that causes the program to report its true size.

Alan Stevens

A We're happy to confirm your suspicion that this is a false report. You might think it odd for Windows to make such a mistake but it's important to remember that Money Plus is now nearly 20 years old and from the days of Windows XP. It's also 13 years since Microsoft ended all support for the product.

In short, Money Plus is not made for



Windows mistakenly calculates Microsoft Money Plus as 101GB in size

modern Windows, and such quirks are to be expected. This is a known one, where Windows reports different figures depending on where you look – and in both the Apps section of Settings and the 'Programs and Features' area of Control Panel, Money Plus is indeed reported as occupying 100GB (see screenshot). But, fortunately, that's not actually correct: the true burden is closer to 100MB – the tiniest of fractions of what Windows thinks.

There's no fix, and never will be, but

you can get an accurate report by checking in a different way. Press Windows key+E to open File Explorer, then locate the Money Plus installation folder – which will almost certainly be **C:\Program Files (x86)\Microsoft Money Plus**.

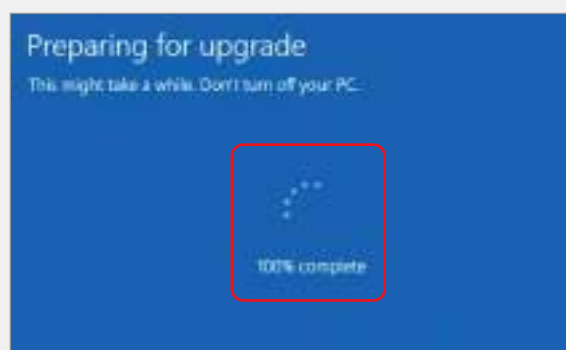
If so, in the C:\Program Files (x86) folder, right-click the Microsoft Money Plus folder and choose Properties. Next, look at the 'Size on disk' figure to see how much space the program is really occupying on your system.

Why does Windows Update pause for so long at 74%?

Q As a long-time subscriber I always turn first to the Problems Solved pages when my new copy arrives. This is more of a general question than a specific problem, and it's been puzzling me for years. Whenever I do a cumulative or large Windows update on either of my Windows 10 PCs, it seems to pause for a long time, almost always at 74 per cent, before eventually completing. What happens at this point to hold things up?

Phil Hughes

A You'd need to ask Microsoft what specifically goes on at this point to make Windows



Windows Update says '100% complete', while still leaving you waiting

take a break – but we can assure you it's not a new annoyance, and you're not alone.

Actually, it's not really taking a break. Rather, at each and every stage, the PC needs to process data and carry out any number of actions. Some of these are

quick and simple, but those that occur around this mark tend to be the big, complicated tasks that just take more time. Remember, it's a percentage – not a clock. This is probably best demonstrated when Windows Update says '100% complete' (see screenshot), while still leaving you waiting!

We've often thought that a clock might be a better guide for users but it's probably not practical. Every PC is different, and different update tasks will take variable amounts of time depending on any number of factors. So for now we're all stuck with the progress expressed as a percentage – and the variable pauses that this inevitably means.

Can copper phones call non-copper phones?

Q I've been reading your articles about the end of copper-based landlines by 2027. But there's one thing I'd like clarified. When I switch to having my own 'landline' calls via my router, while still retaining my landline number, will people who are still on a traditional landline be able to phone me on that number?
Scott Geissler

A We've had hundreds of questions about the copper line switch-off, but we think this is the first time we've been asked this.

It's a fair question, because it's not entirely obvious whether someone reliant on a traditional copper line and the archaic public switched telephone network (PSTN) could use their phone to dial up someone connected via a fibre line and an internet router.

But the simple, happy answer is yes: they'd be able to call you, and you'd be able to call them. Without worrying too much about the technical details, this is because in either direction the call would pass through a 'gateway' that converts the voice signals from analogue to digital, or vice versa. Fortunately, that's all handled by the telecoms provider. As a subscriber, you or your contact will just dial the required phone number – as you've always done.



Credit: necip duman, pexels

After the switch-off, copper-based phones will still be able to phone digital lines, and vice versa

What are these '.rec' files on my camera's memory card?

Q I used a file-recovery tool on one of my camera's damaged memory cards, successfully recovering all my images. However, the process also recovered about a dozen files with a '.rec' extension. What are they and how do I open or convert them?



Pete Surfer '.rec' files could contain video footage shot by a dashcam

A We can think of a couple of possibilities. The first is that this is some kind of **proprietary** file format used by your camera, possibly for video recordings. However, we're not aware of any of the big camera brands using a proprietary format that results in '.rec' files.

The other possibility is that they're video-recording files created by a car's dashcam (like the one pictured above right). Have you ever used this memory

card in such a device? We have a strong hunch that you probably have – and that these recovered files are from that machine.

It's possible that they'll play back only on the original recording device. However, you could always try them in the free media player VLC (www.videolan.org, see screenshot below), which has a deserved reputation for being able to handle pretty much any video file ever invented.



The free media player VLC can play almost any file format

Q: How do I access my laptop's old hard drive?

A: Issue 658, page 68 – find it on our 2023 Back Issue CD

Buy it from
www.snipca.com/48860



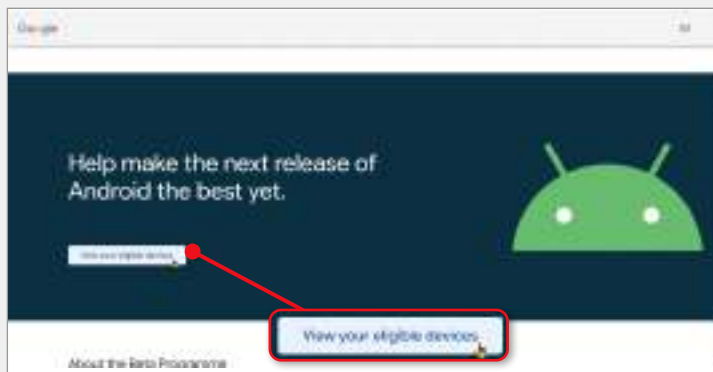
Why is my Pixel phone switching itself back on?

Q I have a Google Pixel 7a phone that's causing me problems. Before I go to sleep, I power the device fully off then plug it into the mains to charge. However, as soon as the power is supplied, the device powers itself back on and launches ready for use. I'm on Android 15 Beta 4. I don't want my phone powering up when I turn it off. Can you help me with this?

Ethan Armstrong

A Perhaps surprisingly, this is actually an intentional feature on many phones. Sometimes this is because the phone itself needs to be on in order to manage the charging process. However, more often than not it's because some manufacturers assume that plugging in a phone to charge means the owner wants to use it – so the phone 'helpfully' switches itself back on.

But that's not the case with the



Opt out of the beta programme via the 'Android Beta for Pixel' homepage

Google Pixel 7a – unless the phone's battery is completely dead, it shouldn't power up when you plug it in to charge. However, a glitch in a recent Android update has apparently caused this to occur on some models. That was fixed with a July update to Android 14 (www.snipca.com/51742). However, you've opted into Google's beta programme, so your phone is on Android 15 Beta.

You could opt out of the beta programme, via the 'Android Beta for

Pixel' homepage at www.snipca.com/51743. Click 'View your eligible devices' (see screenshot) then click 'Opt out' next to the relevant device. Bear in mind this will wipe your phone and return it to Android 14. We doubt you want that. So, instead, we'd suggest putting up with it for a few weeks. The final version of Android 15 should be released very soon – and it'll probably include the same fix for this bug that has been applied to Android 14.

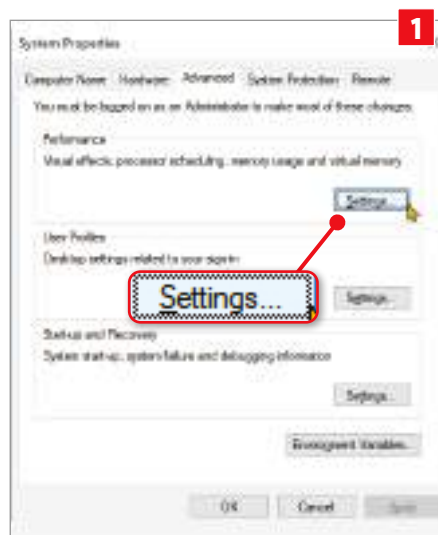
How can I manage the 'Pagefile.sys' file?

Q My interest was piqued by your reply to Jim Abernethy in Issue 689's Problems Solved section (page 66), in which you said Windows' 'Pagefile.sys' file effectively manages itself. I looked for it on my system and found that it was occupying 20GB. I have a 1TB hard drive so I'm not too worried, but I'd like to know if I can manage this file myself? It seems anything that takes up so much space should at least be under my control!

Jack Montgomery

A You can take manual control of the 'Pagefile.sys' file, though we wouldn't really recommend it. Windows is pretty good at doing this itself, and limiting its size could slow down your PC – because it treats 'Pagefile.sys' as a form of **virtual memory**.

That said, it's easy enough to do, and there's no harm in experimenting. First press Windows key+X to open the Quick Link menu, then choose System. Next, on the right, click the 'Advanced system



To manage the 'Pagefile.sys' file, click Settings in the Advanced tab of System Properties...

settings link'. Then, in the System Properties box that appears, click the Advanced tab. Now, in the Performance section, click the Settings button (see screenshot **1**) then, in the Performance Options box, choose the Advanced tab. Finally, in the 'Virtual memory' section, click Change (see screenshot **2**).

Untick the 'Automatically manage paging file for all drives' box and you can



...then, in the Performance Options box, click Change in the 'Virtual memory' section

now you can tweak 'Pagefile.sys' as you want. For example, choose the 'Custom size' option and tap a value into the 'Maximum size' field to limit its size, or choose 'No paging file' to disable it entirely. Click OK when you've finished.

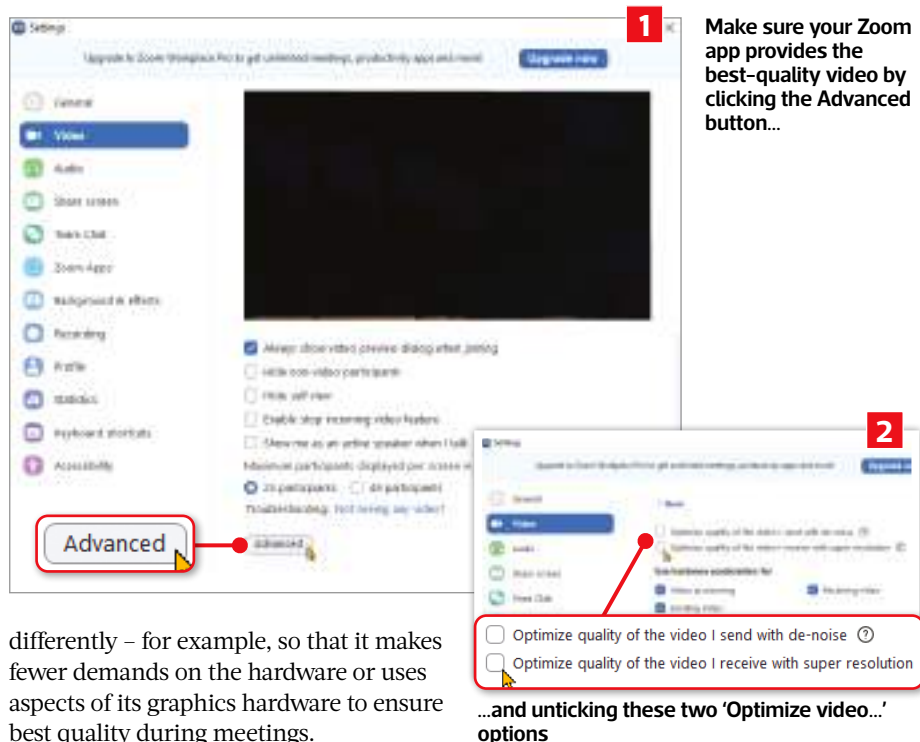
Problems Solved

What's causing low-quality video and sound on my Zoom calls?

Q I have an Asus ZenBook Flip 13 laptop that I'm generally very happy with. However, during Zoom meetings, when the host shares a video, the picture is jerky and the sound is unclear – especially if there's music playing. I have good download speed of over 140Mbps. I contacted Asus and the company said it was a problem with the Zoom app. My wife has an older Asus machine and, when on the same Zoom meeting, her laptop is fine. Any suggestions would be most welcome.

Iain Yule

A It probably is Zoom. We don't know the specifications of your wife's laptop but being older doesn't necessarily make it less capable – it could have a higher specification. Alternatively, the Zoom app on your partner's laptop might be set up



differently – for example, so that it makes fewer demands on the hardware or uses aspects of its graphics hardware to ensure best quality during meetings.

To check and tweak both of these factors, first click your Zoom avatar or initials at the top right then choose Settings. Next, on the left, click to select the Video tab and then, on the right, click the Advanced button (see screenshot 1).

...and unticking these two 'Optimize video...' options

Then, try unticking both the 'Optimize quality of the video...' boxes. Finally, if available, under 'Use hardware acceleration' ensure that all three boxes are ticked.

How can I buy a good-quality replacement battery for my Galaxy Tab A tablet?

Q I have an old Samsung Galaxy Tab A tablet. It's been great, but the battery has begun to die. I previously bought a replacement battery for an old tablet, which was fine but didn't last long. I suspect that many of the replacement batteries you can get online are second hand or are low quality. Is it possible to get a top-quality replacement battery for my Galaxy tablet? If so, where from?

David Doe

A There's no easy answer to this. We don't know your exact model and manufacturing year but, even if we did, there'd still be no definitive answer. This is because manufacturers like Samsung use a wide range of component suppliers, so in any given production run any one of dozens of different batteries could be considered the



Identify your specific device's component using iFixit's guides

manufacturer's 'original'.

We'd suggest you check iFixit's Galaxy Tab A guides at www.snipca.com/51744. Find your exact model, and then zoom in

on the photos to see what you can discern from the close-ups, in terms of exact part numbers (see screenshot). Then look online for a company selling it.



WHAT'S THE DIFFERENCE BETWEEN...

Local, LocalLow and Roaming system folders?

Q I enjoy video games and have recently been playing Supermarket Simulator (www.snipca.com/51891). I had a problem with a save file and the game's online forum told me to uninstall the game, then press Windows key+R and delete a particular folder at `userprofile/AppData/LocalLow`.

I did this, then reinstalled the game and everything has worked fine since. However, while doing this I noticed three folders within AppData – Local, LocalLow and Roaming (see screenshot). I understand that you shouldn't delete anything within these folders. Have I done any damage by deleting a specific folder for the game? Could you explain the difference between those three folders?

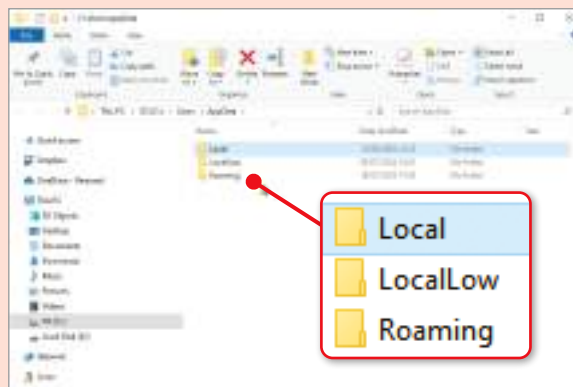
Alex Web

A It's generally not a good idea to delete items from system folders, unless you know what you're doing, and why you are doing it. We've had to shorten your email a little but we can say that, in this instance,

These three system folders contain files that are specific to your PC or need to be synced across several devices

you haven't done any damage. You deleted a game-specific folder that contained some corrupted data, and the game recreated that folder. You'd researched the process before doing it, and all ended well. So, let's address your question about the differences between Local, LocalLow and Roaming.

The Local folder stores data specific to your computer and isn't synchronized with other PCs. It's typically used for larger files that don't need to be shared across systems, such as program folders (which are normally installed or re-installed independently on each machine). LocalLow is similar, but with reduced administration (admin)



privileges. It's used by programs, like Supermarket Simulator, that need to be able to save files locally – but without being given access to the wider system.

That just leaves Roaming. This contains data intended to be synced across different devices, via a Microsoft account. This could include, for example, your web browser's bookmarks or settings for programs like Microsoft 365 (Office).

 Want to know the difference between technical terms? Email noproblem@computeractive.co.uk

Can I replace BIOS with UEFI on my Lenovo PC?

Q I've been a *Computeractive* subscriber for years and I'd be grateful if you could offer some advice. I want to upgrade my ageing Lenovo H330 desktop PC (pictured) with an SSD. I've done the same thing with several laptops but – although I've completed all the usual steps of cloning and fitting – I cannot convert the installed Lenovo BIOS to UEFI. The only options offered are SATA or IDE. Lenovo

tells me that the BIOS is correct for the machine and no update is available. Can you advise?

David Fisher

A It's not possible, in any meaningful sense, for a user to replace a PC's BIOS firmware with UEFI – the systems are fundamentally different. However, we think you may be confused by the fact that previous machines on which you've done this have offered the choice of UEFI or Legacy boot. These are options that can only be offered by computers that have a UEFI rather than a traditional BIOS, because the Legacy mode effectively emulates the way that older, BIOS-based PCs did things – which can be useful in certain circumstances or setups.

However, your H330 is an older, BIOS-based PC, so it can't offer the UEFI firmware, but nor does it need to offer a

'Legacy' mode – because in this context SATA and IDE are the 'legacy' modes.

More specifically, while you didn't tell us which SSD you've bought, any model able to fit into your old desktop PC would have to use a SATA interface – so that's the option you should choose in order to continue.



Lenovo's H330 is an older, BIOS-based PC, so it can't offer the UEFI option

Next Issue

ONSALE
Weds
9 Oct

- Why has my fingerprint reader stopped working?
- Why does my old program use so much storage?
- What's up with my laptop keyboard? ...And many more

Subscribe to *Computeractive* at www.getcomputeractive.co.uk

READER OFFER!

**LOWEST-
EVER
PRICE!**

Norton 360 Premium 10 devices, 2 years

We're delighted to announce our lowest-ever price for Norton 360 Premium. For just **£19.99**, you'll protect **10 devices for two years**. Available both for new customers and existing Norton users wanting to renew.

WHAT YOU GET

- ✓ Real-time malware protection
- ✓ Secure VPN
- ✓ 75GB PC Cloud Backup

PLUS Monitors the dark web for your personal information



Norton is made by NortonLifeLock Inc – a standalone company dedicated to consumer cyber safety. It has always performed strongly in *Computeractive* antivirus tests, so we highly recommend it.

10 devices for two years NOW ONLY £19.99*
Normally £179.99

Buy it from our Software Store at **www.snipca.com/33247**

*while stocks last



Reader Support

Having a problem with our recommended software or expert tips? Email editor@computeractive.co.uk and we'll do our best to help

Is isopropanol better than ethanol at cleaning devices?

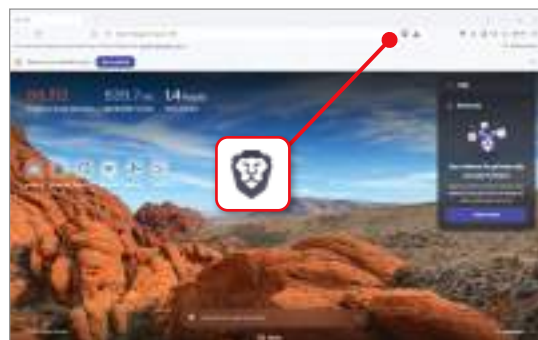
Q In Issue 687's How To (page 35) you recommend using isopropanol for cleaning dirty devices. Why is this better than ethanol which is more widely available as methylated spirits? I find this works well. Also, why dilute it? If dilution is important, why not buy 70-per-cent isopropanol rather than 99 per cent? My understanding is that 70 per cent is used as a disinfectant and 99 per cent for cleaning.

Mark Howarth

A Ethanol and isopropanol are both alcohols and have very similar disinfectant properties, but we would recommend isopropanol for cleaning electronic devices, as it evaporates more rapidly and doesn't leave any oil traces behind. This makes it more suitable for use with sensitive components. As for diluting it – yes, you could indeed buy a pre-diluted 70-per-cent isopropanol solution, but it's usually a little cheaper to buy it undiluted, then dilute it yourself.

Did Brave update stop Shields working?

Q I followed the instructions in Issue 686's Cover Feature to use Brave's Shields feature. I clicked the lion's head at the right side of the bar, but nothing happened. I couldn't see the down arrow next to 'Advanced controls'



that you mentioned. It looks like Brave was updated on 24 June, so did this nullify your instructions? My version of Brave is 1.67.123.

Christopher Emery

A We've verified that Brave's Shields feature still works as we described in version 1.67.123. But it's worth noting that it's only available when there's actually something to block on the web page you're viewing. If there are no **cookies** and trackers on the web page you currently have open, then the lion head icon is greyed out and nothing happens when you click it, as per your experience. Brave's default new tab page is a good example of this – see our screenshot below left. This might explain why you were unable to follow our original instructions.

Why can't I download Glow?

Q Issue 688's Workshop on using Glow (www.snipca.com/51029) to analyse your PC makes no mention of the obstacle put up by Microsoft on software from an unknown publisher. I've spent more than 20 minutes trying to download it. Do you know what's going wrong?

Tom Roberts

A We've checked that downloading Glow from the original link we published works fine, so we're unsure why you're experiencing problems. It's true that we didn't go into much detail in our Workshop about downloading and running the tool, so we'll walk you through the process here. You'll need to make sure you click the 'Glow_v24.10.zip' option at the bottom of the page

If the lion icon is greyed out in Brave, it could mean there aren't any trackers or cookies to block on the web page



If you're seeing a warning message like this, it's likely you're running Windows in S mode, which blocks non-Microsoft Store software

we linked to, saving the file to your Downloads folder.

Next, navigate to the folder, right-click the **ZIP** file and select 'Extract all'. Within the extracted folder, you'll find several files, including two with **.exe** extensions – 'Glow_x64.exe' and 'Glow_arm64.exe'. Attempting to run 'Glow_arm64.exe' will result in a Microsoft Defender SmartScreen warning, which may explain the problem you're encountering. Try double-clicking the 'Glow_x64.exe' file instead – this should run fine.

Another possibility is that your computer is running Windows in S mode. This is a special version of Windows that imposes a number of restrictions on users. One limitation is that you can't install software from anywhere other than the Microsoft Store. Attempting to run an exe file on an S mode PC will display a warning that Windows has blocked the app (see screenshot above), which may be what you're experiencing when you try to run Glow.

To find out whether your PC is running Windows in S mode, click Start, Settings, System, then About and look under 'Windows specifications'. It's possible to switch out of S mode (under Settings, 'Update & Security', then Activation in Windows 10; or Settings, System, then Activation in Windows 11), but bear in mind that once you've disabled S mode, you won't be able to turn it back on.

It's also worth checking whether you're using any third-party security software that may have incorrectly identified Glow as a potential threat.

Jargon Buster

1080p High-definition video: 1920x1080 pixels.

1440p High-definition video: 2560x1440 pixels.

4K Video with a resolution of at least 3840x2160 pixels.

64bit A technology that processes information in larger chunks. Most modern computers are 64bit.

AAC Advanced Audio Coding. A type of music file.

Administrator Someone who can make changes to a computer that will affect others who also use it.

AI Artificial intelligence. Intelligence demonstrated by a machine rather than a human being.

Antivirus engine The core component of an antivirus program that detects malware.

APK Android Package Kit. The file format Android uses to install apps.

Bandwidth A measure of how much data can be transferred through a connection at one time.

Benchmarking Comparing software and products with an accepted standard.

Beta A version of software that's being tested. Beta versions are often released so problems can be ironed out.

BIOS Basic Input-Output System. Software built into every PC that connects the vital components.

Bitrate A measure of data transfer speed, or of the quality of digital video or audio files.

Bootable Describes a device or disc with system files on it so it can be used to start up your computer.

Cache A temporary space for storing information.

cd/m² Candela per square metre. Standard unit of brightness.

Chatbot A computer program designed to recreate conversation with human users.

Clean install An operating system installation that overwrites all other content on the hard drive.

Clone A feature in some backup programs that makes an exact copy of a drive on to another drive.

Code Programming languages used to create software.

Command line A way to control a PC by typing instructions.

Cookie A small text file stored on your computer by a website.

Core Units on a processor that carry out program instructions.

DCI-P3 A colour space that has a wider spectrum than sRGB.

Deepfake A video that superimposes a fake voice over a clip or a fake face on someone's body.

Depth of field The distance between the closest and farthest objects that appear acceptably sharp.

DisplayPort A socket for connecting monitors.

Distro A version of the Linux OS and the programs that go with it.

DOCX The default file format used by Word 2007 and later.

Dolby Atmos Surround-sound technology that adds 'height' to the audio through speakers built into the top of devices.

Driver A file that tells Windows how to work with an external device.

DTS:X A type of surround sound.

Efficiency core Processors used for background tasks that run constantly but don't require much processing power.

Emoji A small graphic that can be inserted into a text or email.

Ethernet A standard used for almost all wired computer networks.

EXE A program file designed to run in Windows.

Firmware Basic software stored on hardware to control its operation.

FLAC A type of digital audio file that can be created from CD with no loss of audio quality.

Fps Frames per second. Used to indicate gaming performance.

Freemium A business model, especially on the internet, where basic services are provided for free, while more advanced features must be paid for.

Geofencing Triggering an action when a device enters a set location.

GHz Gigahertz. A measure of how many instructions a chip can process per second.

Gorilla Glass Victus The latest screen-protection material which its makers claim protects against falls of two metres.

Graphics card A component in a computer that produces the image shown on the monitor.

HDMI A type of connection that transmits high-definition video and audio signals.

HDR High Dynamic Range. Screen technology that improves the range of luminance between the darkest and brightest parts.

Hyperlink A clickable link that takes you to a new document or website.

Hz Hertz. Measures the frequency something happens: 1Hz equals once a second.

IDE Integrated Drive Electronics. An interface used to connect some hard drives and optical disc drives.

IDML InDesign Markup Language. A file format used by Adobe InDesign to represent a layout document in XML format.

IP address A unique set of numbers used to identify computers and websites on the internet.

IPS A screen technology. Monitors that use it have wider viewing angles and better, more accurate colours than monitors that do not use this technology.

ISO file A type of image file that contains data from a CD or DVD.

JPEG A common type of image file created by most digital cameras.

Lossless Music file formats that take up more space but provide higher sound quality.

Macro An automated series of commands or options that can be run at any time. Handy if you often need to perform repetitive actions.

Metadata A set of data that gives information about a file.

MicroSD card A small type of memory card.

MP3 A type of digital audio file often used on music players.

MVNO Mobile virtual network operator. A mobile provider that piggybacks on another network rather than its own.

NAS Network-attached storage. A hard drive attached to a network that can be shared with other PCs.

NPU Neural processing unit. Specialised chip designed for performing AI tasks.

OCR Optical character recognition. The process by which printed text is scanned and converted into documents that can be edited.

OLED Organic light-emitting diode. A thin-film organic light-emitting diode used in computer displays and television screens.

OpenDocument Free open-source format for office documents.

PNG A format for images that shrinks file sizes using compression but without discarding any data.

Port forwarding Choosing which computer in your network a router should connect to.

Product key A unique serial number issued by software companies that must be typed in by the user before a program will launch for the first time.

Proprietary Software or hardware owned by a company with restrictions on its use. Opposite of open source.

PSTN Public Switched Telephone Network. Old copper phone network that's being switched off in 2027.

PWA Progressive web app. A website that looks and works like an app.

Python library Code that provides functions and tools for Python programs.

QR code A barcode that can be read using smartphones.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on.

Refresh rate Measured in Hertz (Hz), the number of times per second that the image on your monitor is redrawn.

Refurbished A second-hand device that has been repaired by its manufacturer so that it can be resold and reused.

Roaming charge Fee incurred for using your phone to receive data via overseas mobile networks.

SATA Interface for connecting hard drives and optical drives to a PC.

Secure Boot A security standard designed to make sure your PC avoids malware when booting.

SIM Subscriber Identity Module. The smart card used by all digital mobile phones.

SIM-only A phone package in which you pay only for the data, calls and texts.

sRGB A standard RGB colour space for use on monitors, printers and the internet.

SSD Solid-state drive. Storage that uses no moving parts.

Subwoofer A special type of speaker designed to reproduce deep bass sounds only.

Tag A keyword used to describe a file or web page.

Thunderbolt A very fast port for connecting external storage to a PC.

TPM A chip that stores keys which encrypt data on your hard drive.

UEFI Unified Extensible Firmware Interface. A modern replacement for the BIOS.

USB 2.0/3.0/3.1 Faster successors to USB.

USB-C A connector that's reversible.

VA A form of LCDs in which the liquid crystals naturally align vertically between the panes of glass.

Virtual machine A software-based computer running inside another computer.

VoIP Voice over IP. The routing of voice conversations over the internet.

Virtual memory Data that is temporarily moved from RAM to hard drive to make up for shortages in memory.

VPN Virtual private network. Keeps all internet communication safe and private.

Widget A small program, such as a Calendar, that runs on the Windows desktop.

WMA Windows Media Audio. An audio format created by Microsoft.

XLS The default file format for Microsoft Excel before version 2007.

Wi-Fi 6E Wi-Fi 6 extended to include the 6GHz band.

Wi-Fi 7 Faster successor to Wi-Fi 6, with an estimated maximum speed of around 46Gbps.

ZIP file A file that contains compressed documents or files.

Broadband Deals

Call **FREE** on **0333 0417 279** to switch your broadband today

	Provider	Package Name	Monthly Price	Contract Length	Broadband Speed	Allowance	First-year Cost
1		Virgin Media M50 Only	£24.00	18 months	54Mbps avg. speed	∞ unlimited	CHEAPEST £288.00
2		Virgin Media M125 Only	£26.50	18 months	132Mbps avg. speed	∞ unlimited	£318.00
3		Sky Broadband Superfast	£27.00	18 months	61Mbps avg. speed	∞ unlimited	£324.00
4		TalkTalk Fibre 35	£28.00	18 months	38Mbps avg. speed	∞ unlimited	£336.00

Terms & Conditions apply - see ISP sites for details
* Fair-usage or restriction policy applies.

Computeractive may receive a commission for purchases made through these listings.

Data supplied by www.broadbandgenie.co.uk. Correct as of 9/09/2024

**Broadband
GENIE**

Broadband Genie's helpline is powered by Dixons Carphone, the Ofcom-accredited switching service

Easy when you **Know How**

Wondering how to open potentially dangerous email attachments, **Robert Irvine** tries to...



Convert risky files into safe PDF's

Back in the days when my work computer was a Mac, I once forwarded a PC-using colleague a mysterious email attachment that my Apple machine couldn't open. Happy to help, he duly double-clicked the file only to find his screen taken over by an obscene message in huge, flashing letters.

Both of us were horrified, especially as most of the office could see his monitor, and the offensive screensaver could only be removed by resetting Windows. Understandably, he didn't speak to me for weeks and though I placed the blame squarely on the prankster who'd sent me the wretched thing, I also learned a valuable lesson: never open an email attachment unless you know exactly what it contains.

“

**One malicious macro
can wreak havoc far
worse than a rude
message**

”

It's a rule I've generally stuck to ever since, and frequently stressed in articles I've written about online security, but it's not always possible. As a journalist, I receive lots of emails from people I don't know, which sometimes contain important information within attachments. Although these files can usually be trusted, or are otherwise blocked by our IT department's email-security filters, it would only take one malicious **macro** to wreak havoc that was far worse than a crude message.

With this in mind, I was interested to read about a free security tool called Dangerzone (<https://dangerzone.rocks>), which converts potentially dangerous



Dangerzone converts suspicious documents into safe PDF files

documents, images and other files into “safe PDFs”. It's recommended for journalists who need to open unsolicited items despite the risks, but also sounded ideal for anyone trying to strike a balance between curiosity and caution.

To find out if and how Dangerzone works, I downloaded the Windows version from www.snipca.com/51941. This was an 874MB file, so I amused myself while waiting by playing the Kenny Loggins song ‘Danger Zone’ from the film *Top Gun* (www.snipca.com/51942).

Once downloaded, I installed and launched Dangerzone, which told me it required a ‘containerisation’ program called Docker Desktop. I clicked the link to download that too (492MB from www.snipca.com/51943) and installed Docker Desktop on my PC.

I then signed up for a free Personal account with Docker Desktop and relaunched Dangerzone. This spent several minutes installing a ‘container image’ before finally opening.

Dangerzone greeted me with a simple interface, with the option to either drag and drop risky files into its main area or click the ‘Select suspicious documents’ button. I added a **DOCX** file, set it to open after converting (1 in our screenshot) as I knew it wasn't really dangerous, and clicked ‘Convert to Safe Document’ 2.

Sadly, rather than present me with a

safe PDF, Dangerzone instead displayed: ‘Unknown error code 1’. I tried different file formats – **JPEG**, **PNG**, **XLS** – but got the same result. Tweaking the program's few settings didn't help, and neither did running Dangerzone as an **administrator**. Determined not to be beaten, I searched online for help and found a suggestion to install the latest version of Windows Subsystem for Linux (WSL, www.snipca.com/51945) – another hefty (350MB) download.

This clearly did the trick, because when I tried converting the original DOCX document again, Dangerzone processed it successfully and opened the resulting PDF in my default viewer. It also converted image files and spreadsheets.

Reading up on exactly *how* Dangerzone works, I learned that it uses Docker Desktop to ‘sanitise’ suspicious files in a container, which isolates them from both your PC and the internet. It then transfers the files to a second container, converts them to PDF and uses **OCR** and PyMuPDF – a ‘high-performance **Python** library’ – to extract their text and image content. This data is then saved as new PDF files that are free of nasty surprises.

Something like that, anyway. But after all that downloading, I was done with danger and ready for the nap zone.

 **Need help protecting your PC from risky attachments? Let us know: noproblem@computeractive.co.uk**

PHASE

Alpha Phase [IVY3]



INTEL Core i5 12400
ASUS PRIME H610M-K D4
ADATA 32GB DDR4 3200Mhz
ADATA 1TB M.2 nVME
LG 24X DVD+/-RW & BluRay Combo Drive
INTEL HD730 Integrated Graphics
FRACTAL Core 1100
MICROSOFT Windows 10/11 or 10/11 Pro

Windows 11

£499.99

Intel
CORE
i5

32GB
RAM

1TB
M.2 SSD

The combination of the Intel Core i5-12400 processor, 32GB of DDR4 RAM, and a 1TB M.2 SSD offers a compelling package for both everyday computing and more demanding tasks such as content creation and photo/video editing use.

CoBRA

AMD Cobra [RYZ10]



AMD Ryzen 5 5600G
ASUS PRIME A520M-K
PALICOMP 16GB DDR4 3200Mhz
ADATA 2TB Legend M.2 nVME
1stPLAYER D3-A Black
AMD Radeon Vega Graphics
MICROSOFT Windows 10/11 or 10/11 Pro

Windows 11

£399.99

AMD
RYZEN
5

16GB
RAM

2TB
M.2 SSD

The Palicomp AMD Cobra is a budget-friendly desktop that offers solid performance for its price. It features an AMD Ryzen 5 5600G processor, 16GB of RAM, and a 1TB SSD, making it suitable for everyday tasks and light gaming.

i5

Aurora

i5 Aurora [AUR2]



INTEL i5 14400F - 10 Cores - 16 Threads
ASUS B760M-K
CORSAIR 32GB DDR5 6000Mhz
ADATA 2TB M.2 NVMe
NVIDIA RTX4060 8GB
CORSAIR iCUE 4000X
MICROSOFT Windows 10/11 or 10/11 Pro
DEEPCOOL AG400 Air Cooler

Intel
CORE
i5

32GB
RAM

2TB
M.2 SSD

£999.99

This high-performance PC build featuring the Intel i5-14400F processor, 32GB of DDR5 RAM, a 2TB M.2 SSD, and an NVIDIA RTX 4060 GPU is tailored for gamers, content creators, and power users. With cutting-edge components, this setup promises robust performance and future-proofing for various demanding applications.

www.palicomp.co.uk



intel

3 YEARS
WARRANTY

AMD

Buy Now
Pay Later



PRE-BUILT PCs - CPU/MOTHERBOARD BUNDLES



GAMING PCs

Custom Build. Prebuilt.



Order today!

✉ sales@cyberpowersystem.co.uk ☎ 03333-237776

Follow Us! A row of social media icons for TikTok, Facebook, Instagram, Discord, X, YouTube, and LinkedIn.

Visit our website!

